LIGHTING UP THE PAST: AN ARCHAEOLOGICAL PERSPECTIVE ON LIFE ON EARLY 19-20TH CENTURY FARMSTEADS IN CENTRAL PENNSYLVANIA

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ABSTRACT

The nineteenth-century farmstead lifestyle is understudied in historical archaeology, yet the majority of archaeology sites in Northern America are historic farmstead sites. The lack of knowledge about this time creates an intrigue that only a study into the lifestyle from artifacts of the era could answer. This study creates a concrete view of the lifestyle of farming communities living in rural central Pennsylvania from 1830 – 1930. Utilizing excavated artifacts from two farmstead sites located in Barree Township, PA, Scare Pond Farm and the Massey Site, this study takes an in depth look into the origin of these artifacts and more importantly the information these objects can tell us about the lives of the people who owned them. In addition to researching the nineteenth-century farm life, another result of this thesis is to create a children’s museum exhibit design for the Discovery Room, an exhibit space in Penn State’s Shavers Creek Environmental Center. The museum design follows the artifact analysis on the two archaeological sites.
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Chapter 1

Introduction

Situated in the Penn State Stone Valley Forest, partially covered in years of vegetation, lies the foundations of two rural American houses that have stories to tell. Abandoned and undisturbed for more than eighty years, the two sites were explored by Pennsylvania State University archaeologists from 2006 to 2009. Referred to as the Massey Site and Scare Pond Farm, the exploration of these archaeological sites are an example of a recently developed field in historical archaeology -- the uncovering of the recent rural past, the American farmstead.

Life in nineteenth-century rural central Pennsylvania, as with elsewhere in America, is often misunderstood because of two general diametrically opposed assumptions about farm life. The first assumption presumes the farmer lives an isolated life, cut off from communication networks, urban areas, markets, and technological advancements. The second misconception often applied to nineteenth-century rural America, is the idea that the bucolic life was actually a hard working, “pioneer life” where the farmer produced all they needed to survive, and did not buy and sell goods (Fletcher, 1947; Rohe, 2017). These assumptions echo the yeoman myth, which became popular at the end of the 18th century and rose in prominence during the Jeffersonian Era (Renck, 2002; Kitch, 2012). The yeoman myth is a romanticized view of rural life that disconnects the rural and the urban, praising the farm culture as one of virtue due to its isolation from the corrupting nature of the city (Browne & Reid, 1990).

In reality, rural life in nineteenth-century central Pennsylvania was very different from either view. Improvements in transportation and the establishment of small towns occurred throughout the countryside. Railroads began a formal consolidation of individual lines into a national system by the 1850s, which opened up access to larger markets for farmers (Black, 2016). In expanding these trade networks, the railroads helped farmers by shipping products to larger markets where demand was high,
creating a profitable relationship early on in railroad introduction to rural lands (Black, 2016). Toward the end of the 19th century, tensions were high as railroading prices soared, causing the farmers to revolt and create a political movement resulting in the formation of the Populist Party. This party would use the yeoman myth as a platform to gain support (Renck, 2002; Black, 2016).

The yeoman myth assumes all farmers are hard-pressed to work their land for a profit, making only enough produce for their family. In fact, Pennsylvania farms were well connected via roads, railroad, and river transportation that allowed farmers to quickly become a larger market producer (Renck, 2002; Rohe, 2017; Lindsey, 2007). In rural America during the nineteenth-century, a farm was economically and socially linked to a local church and town in which farmers would buy goods and sell products at the local market (Rohe, 2017). In addition, the community church would often play a large role in the schooling of the farm children at their one-room schoolhouses (Independence Hall Assoc., 2014).

Depictions of the rural farming life are full of misconceptions that archaeological research on farmstead sites will help to uncover and correct.

Through the exploration of the archaeological remnants at the Massey farms, a world understudied will begin to become understood. It is the artifacts and the architectural features that a culture leaves behind which archaeologists use to better interpret how life was lived on rural central Pennsylvania farms. In this study, artifacts from each of the two sites were chosen that represent different facets of life on the American farmstead. The objects and time period were researched to produce the result of the project: a potential design for a children’s museum exhibit at the Penn State Shavers Creek Environmental Center. The research focuses on understanding the artifacts from the site, the historical significance of the period, and how to educate on the importance of the nineteenth-century central Pennsylvania farm life.
The Sites and Artifacts

The two archaeological sites researched in this study are historic farmstead sites located in Barree Township, a rural area in central Pennsylvania located in Huntingdon County. The two sites, the Massey Site and Scare Pond Farm, are located in the modern-day Stone Valley Recreation Area owned by The Pennsylvania State University. Originally, Daniel Massey, as indicated on the 1873 Barree Township Map, (Figure 1), owned these two properties. Figure 2 is a portion of the larger 1873 Barree Township Map (Figure 1), which highlights the Daniel Massey properties marked with “D. Massey.” The northernmost property is the Massey Site where Daniel Massey and his immediate family lived. Daniel Massey’s other property is Scare Pond Farm. Scare Pond Farm’s occupancy is unclear. It many have been his daughter who inherited the property or a tenant farmer. The latter is possible, since farm tenancy was common in central Pennsylvania during this time (Milner, 2017).
Figure 1: 1873 Barree Township Map (Nichols, 1873).
In choosing the artifacts to represent this time for the exhibit, what a child might be interested in was key to consider. In researching children-geared exhibits, it is the contrast of differences between two times that often can spark curiosity in the child’s mind (Ringer, 2005). To find out some of these key differences, the following questions were posed about 19th century farm life:

- How would the farmers get their food?
- What would children do to play?
- What kinds of tools were available on the farm?
- How would the adults entertain themselves without TV?

The artifacts for the project where chosen to represent different aspects of farmstead life and to help address questions children would have about the past. In table 1, the artifacts are separated into the life categories in which they will be addressed in the study.
<table>
<thead>
<tr>
<th>Aspect of 19th-century Rural Life</th>
<th>Artifacts</th>
</tr>
</thead>
</table>
| A Day on the Farm                | • Scythe blades  
|                                  | • Moldboard     
|                                  | • Pig teeth      
|                                  | • Lamp Glass    |
| Food Rots                        | • Stoneware crock |
|                                  | • Tin screw mason jar lid |
|                                  | • Lightning mason jar lid |
| Through a Child’s Eyes           | • Slate pencil  
|                                  | • Doll parts     
|                                  | • Toy wagon wheel|
| A Witch’s Brew                   | • Embossed medicine bottle “of Cherry Tar” |
|                                  | • Rectangular, clear glass medicine bottle |
|                                  | • “R.C. & C.S. Clark Chemists” Medicine Bottle |
| Fun on the Farm                  | • Harmonica reed  
|                                  | • Kaolin Pipe    
|                                  | • Marbles        |

Table 1: Historical aspect and corresponding artifacts analysis from the Massey sites.

The Massey Family

Daniel Massey was born in 1792 in Huntingdon County, Pennsylvania to Mordecai and Sarah Massey. Mordecai and Sarah Massey moved to the area before Daniel Massey’s birth in the early 1780s (Milner, 2017). Daniel Massey grew up in Huntingdon County, remaining close to his family during his life. In his early years, he was listed with his brother Robert on his taxes as “single men” who co-owned a distillery (Milner, 2017). It is unclear when Daniel Massey started an independent household, but it is highly likely that his household was established before the birth of his first daughter in 1825 (Milner, 2017).

The Daniel Massey household consisted of his wife Susan Jacobs, and two daughters; Elizabeth Massey, probably a daughter from a previous marriage, and Sarah Jane Massey, daughter of Daniel
Massey and Susan Jacobs (Milner, 2017). According to Daniel Massey’s will, his daughters later inherited his properties. Elizabeth Massey was granted the Massey Site, and Sarah Jane (Massey) Kocher was given Scare Pond Farm (Milner, 2017). Daniel Massey is listed as owning approximately a hundred acres of land in 1841. By the time of his death in 1875, Daniel Massey had acquired over five hundred acres of land under his name (Milner, 2017). The subsequent ownership and occupancy of these sites is unclear, until the United States Department of Agriculture acquired them both at the end of the 1930s. Scare Pond Farm sold in 1937 and the Massey Site sold in 1938 (Milner, 2017). The Pennsylvania State University purchased or were given both of the properties when the university obtained numerous farms from the State of Pennsylvania (Milner, 2017).

**Thesis Goals**

Each of following chapters explores a historical category and its associated artifacts in order to piece together the story of 19th century central Pennsylvania farmstead life. This study acts as an effort not to provide a singular view of a farmstead lifestyle, but to continue the recent efforts made by historical archaeologists to shed a light onto the American farm family lifestyle from the nineteenth century to its decline in the mid-twentieth century. In the last chapter, I will provide a possible museum exhibit design for Penn State’s Shavers Creek Environmental Center in order to demonstrate the importance of farmsteads and their fascinating history not only to the archaeological record but also to the local community, particularly children who know little of rural life 150 years ago.
Driving through farm country in central Pennsylvania, things would seem amiss if the countryside were not scattered with a handful of John Deere tractors and the occasional classic, beaten-down pickup truck. These two stereotypical objects have seemingly become iconic symbols of the American farm labor force; yet, the motorized, gasoline-powered engine tractor and the pickup truck are young inventions, manufactured in the 1890s and 1920s, respectively, when compared to the roots of farming in America (Spielmaker, 2014; Rieger, 2010). This begs the question: what were things like before the introduction of gasoline-powered engines and electricity in rural America, a time when things were done with horse and hand?

As one tries to paint a picture of farm life in the nineteenth-century, daily life is characterized by the mainstream media-driven motifs of the romanticized yeoman and the hardworking pioneer. Dr. Warren H. Wilson, the 19th century superintendent of the Presbyterian Church Board’s Department of Church and Country life, wrote about country life in four distinct periods, beginning with the pioneer (Eggleston & Bruère, 1913, pp. 4-5). In addressing the pioneer lifestyle, Dr. Wilson outlines the origins of the pioneer: the lone farmer building his identity on struggle, independence, and complete self-reliance. The work is hard, as the clearing, plowing, and harvesting of the land is done alone (Eggleston & Bruère, 1913, pp. 5-7). The urban view of rural life as a pioneer life is a misconception because the agriculturalist did not farm the land alone and relied on various laborers as well as social connections between neighboring farmers to function (Rohe, 2017).

The yeoman myth, another misconception of farm life in the past, suggests the farm life as the ideal life – living self-supported off the land and away from the corrupting influence of urban life (Renck, A. 2002; Kitch, 2012). The nineteenth-century farm life was far from an isolated one, as the societal and economic connections farming families made allowed trade to be possible. This trade generated profit to
support the farmstead lifestyle. Perhaps the most accurate modern-day representation of 19th century farm life can be seen by taking a drive into Lancaster County to view the Amish culture. The Amish mostly work their farms with horse-drawn plows, live in houses with no electricity, and drive to town with horse-drawn buggies. As we will see, this lifestyle is comparable to the way of life on the nineteenth-century rural Pennsylvania farm.

**Structure of Farm Life**

The weather and the land govern a farmer’s day. In the sowing season, the farmer and his family work together to prepare the land and plant the seeds. In the growing season, the farmer tends to the crops, making sure the land is well irrigated. In the harvest season, the farming family collects all the crops from the year and gets ready to distribute it to its local trade market, which extends one or two miles around a town (Galphin, 1918, pp. 73-75). The family farm is both a socially and economically driven vehicle that merges the business practices of agriculture and the social network of rural communities (Rohe, 2017).

The independent family-run farm was common in the United States in the nineteenth-century. Yet, the self-dependent, family farm stood in contrast to the standard farms in Europe and Asia. These agricultural communities consisted of the farmer’s homes clustered together with their fields extending outward from the town (Rohe, 2017). In the United States, family farms were spread out with the local town, and trading center, around one to two miles away (Galphin, 1918, pp. 73-75).

The standard practice of operation on a farmstead was what historian Mark Groover refers to as the “production-consumption model” (2007). In this model, the family relies on household labor to produce the food products that they consume. The model is based on pioneer subsistence farming in which the focus of the farm is self-supporting and the buying and selling of goods is not a high priority (Fletcher, 1947). The family farm model started during colonial America in southeastern Pennsylvania.
The original family farm model established the norm for new farmers settling out west in the mid to late 19th century (Rohe, 2017). However, in the early nineteenth century, Pennsylvania farms were able to turn a profit.

In nineteenth-century America, farms depended on both male and female labor, although in different spheres of influence. Women worked in the domestic sphere, in control of child rearing, the household operations, and the family garden (Gimber et. al., 2011). The men were involved in the work outside the home including growing the crops, raising animals, and interactions between families. Farming families often could not afford separate working spheres for the family. The women and children were able to do most of the same tasks as the men to sustain the farm (Jenson, 1980). On the farm, women still had specific responsibilities that sometimes differed from the men’s daily tasks, most notably butter making, a very profitable trade which equally contributed to the farm’s monetary gain (Gimber et.al., 2011). Agriculture can be an unstable lifestyle, making it necessary for all family members to work to be flexible due to variable climate, soil, and water conditions (Jahn, 2009; Roberts, 1902).

Children working on the farm were essential to the success of the family business, both in the home and the fields. From a young age, as early as five or six, a child works on the farm and begins to learn the trade. They learn the skills of farming and practice the skills until the work becomes habitual (Galphin, 1918, pp.119-120). As they matured, the children took over the work of the family or started a nearby farm of their own. Only in the late nineteenth century to early twentieth century, did more children leave farm life for city jobs rather than inherit the family farm. When rural electrification occurred in the 1930s, the farming children left to find more opportunities in the city, especially women when jobs in the city started to become more readily available (Gimber et. al., 2011).

Neighbors provided an additional labor source for the farm. The neighbors became a part of the farm’s social network, called upon when the need arose making them vital to farm operations (Gimber et. al., 2011). The neighbors would not only partake in trading goods and services, but would loan a child to
a neighboring farm to work (Gimber et. al, 2011). In these exchanges, the farmers saw children as an important social advantage in forging positive trade relations with neighboring farms.

Other sources of labor on farms came from farm tenancy, a practice where laborers would rent land from the landowner and farm the land. In nineteenth-century Pennsylvania, farm tenancy was common. In fact, by the end of the 19th century tenant farmers inhabited and ran more than a quarter of Pennsylvania’s farms (Gimber et. al, 2011). In central Pennsylvania alone, tenant farmers ran over forty percent of farms (Vitello, 2007). However, there was a big problem with tenancy. The tenant farmer did not care about the long-term productivity of the land. This issue arose due to the increasing value of the land, which made landowners offer short, one-year tenant leases (Eggleston & Bruère, 1913: 5-7). Because land was precious in Pennsylvania, landowners preferred a short tenant lease so they could sell in case the land’s worth rose high enough (Eggleston & Bruère, 1913: 5-7; Gimber et. al., 2011). With only a year to work the land per lease, the tenant farmer would over-farm the land, reaping all usable profit with little care put in to improving the land for the next season’s harvest (Eggleston & Bruère, 1913: 5-7).
Prior to the 1830s, farm equipment had changed little from the Roman times. Many agriculturalists were still using rudimentary farm technology, such as a crooked stick with a cast-iron point as a plow (Sampson, 1919). The end of the eighteenth-century in America brought advancements in agricultural technology with the introduction of the cradle and the scythe (Speilmaker, 2014). Farmers used the cradle (Figure 3) and the scythe blade to harvest wheat. The cradle and scythe allowed farmers to cut the wheat fields down more efficiently during the harvest. The initial wave of mechanization occurred prior to the Civil War and saw the introduction of the walking plow, the first plow with interchangeable parts (Speilmaker, 2014).

However, it was not until the mid-19th century that mechanization on the farm started to increase rapidly due to two major factors. The first factor was the switch from hand power to horsepower in the 1860s, which allowed for the inventions of new technologies such as the sulky plow and the gang plow, which were both horse drawn and aimed at increasing production yield (Speilmaker, 2014). The second factor was the expansion of trade networks and the growing demand for agricultural products in both the rapidly growing urban areas, as well as the global trade centers that were connected to rural areas through railroad expansion (Speilmaker, 2014). To show the impact of mechanization, we can look at the labor it took to produce a hundred bushels of wheat, approximately 5 acres of land. In 1830, agriculturalists required 250 to 300 labor hours using a walking plow and hand power to harvest a hundred bushels of wheat. In comparison, it took 40 to 50 work hours in 1890 using horse power and the gang plow, which was widely distributed in the 1870s (Speilmaker, 2014).
Farming technologies made agricultural processes more efficient. Due to this improved efficiency, some farms turned into large-scale commercialized operations, which outcompeted the family farm in the national and global markets (Gimber et. al., 2011). The agricultural industrial revolution, which brought machinery to the fields, ended up reducing the number of farms needed to sustain the country. In 1860, forty-eight percent of the country’s population were agriculturalists as compared to the modern day value, of less than one percent (United States Department of Agriculture, 2010). While the family farm saw its beginnings and peak during the nineteenth-century. It declined in the early twentieth-century due to farm commercialization.

Daily Life on the Massey Site

How was life on the Daniel Massey farm? Daniel Massey and his family operated a family farm in nineteenth-century rural central Pennsylvania. According to the US Census tax records, Daniel Massey owned five horses and four cows in 1837 and several horses in 1875 (Milner, 2017). In the archaeological excavations at the Massey Site, pig teeth were also found indicating that the Daniel Massey family had raised pigs as part of their livestock (Milner, 2017). This made the Daniel Massey family quite established in a cursory look among the other farm owners at the time. There are additional names listed on the Massey household record, indicating a probable laborer who lived with the family. A tenant farmer may have occupied Scare Pond Farm.

Pig Teeth

During excavations, archaeologists found many faunal bones on the Massey Site. There is evidence in the archaeological record of horses, cows, and pigs raised on the site confirmed by the historical documents. Horses were traditionally work animals for the farm. In contrast, pigs and cows were seen as important for their production values in meat and other products. Pigs were arguably the
most favored livestock by Pennsylvania settlers because they required little care, gave birth to large numbers of offspring, and supplied sufficient meat and cooking fats (Gimber et al., 2011). In the 19th century, selective breeding became popular in the Pennsylvania agricultural scene. The development of the Chester White, a breed of swine that could eat household food waste and gain weight at a rapid pace from Chester County, Pennsylvania, was revolutionary to the commercialization of the farm animal industry (Gimber et al., 2011).

Scythe Blades

![Scythe Blades Image](image)

**Figure 4: Scythe blades found at the Daniel Massey properties, 10 cm scale.**

The scythe blade is an example of an early farming technology, introduced to United States agriculture in the 1790s (Speilmaker, 2014). The scythe is used to reap cereal grains as well as mow green crops. A semi-circular motion is made with the scythe as it cuts through the crop making it a faster process than the sickle at 500 square-meters mown per hour (Hopfen, 1969, pp. 112-114). A scythe is a scythe blade (Figure 4) that is attached to a long wooden handle. A scythe used in operation with a cradle, a metal basket attached to the scythe, (Figure 3) cuts closer to the ground when reaping cereal crops, making the process three times faster than that of a sickle (Hopfen, 1969, pp. 113-115).
This moldboard, part of the plow, was found at Scare Pond Farm. The plow is one of the most important pieces of farm equipment, because it helps prepare the soil for sowing. From a crooked stick to the tractor-pulled plow, the plow has seen many transformations as it became mechanized throughout the nineteenth century. The walking plow, first invented in the early nineteenth-century, contains mechanisms that churn the topsoil (Rehkugler, 2011). An added shearing motion breaks the soil and improves the overall quality and structure of the soil. The modern plow consists of many implements: a plowshare, the point of the plow; the moldboard, the curved section that inverts the soil; the pulling beam, where the horse would attach; the landside, which provides balance to the plow; and the coulter, used to divide the soil in front of the plow (Rehkugler, 2011). The walking plow is the first horse-drawn plow and represents the most common kind of plow on the American farm in the nineteenth century. In the 1860s, the sulky plow and gang plow were invented, which are also both horse-drawn, but the farmer can sit on
the plow. The modern plow, which is fully automated, and run by a gasoline engine was not introduced until the late 1890s (Rieger, 2010; Rehkugler, 2011; Speilmaker, 2014).

Lamp Glass

![Figure 6: Lamp glass from the Massey Site.](image)

Since rural electrification did not occur until the 1930s, lamps were used in 19th Century Pennsylvania homes (Gimber et. al., 2014). This particular glass piece (Figure 6) is part of a lamp chimney from a kerosene lamp (Woodhead, Sullivan, & Gusset, 1984). Decorated rims, such as the one in the Massey Site collection, indicates a date from 1885 to the early 1900s (Woodhead et. al., 1984).
Chapter 3

Through a Child’s Eyes

Waiting at the bus stop for the yellow school bus to arrive is a classic childhood memory for the modern-day American child. Today, schooling systems have an academic calendar and education-level requirements according to a child’s age. Home schooling children is rare, and a child’s free time is run by their own imagination. The toy industry has flourished creating a multitude of toys from Barbie dolls to G.I. Joe that gear the child’s play (Cross, 1997). Outside, children invent their own games to keep entertained as well as play with sports equipment purchased from the local commercial center. The child plays “cops and robbers,” manhunt, and kickball in the cul-de-sac. There becomes a bond of community from the local kids who all wait for the bus together, who all play together, and who all invent worlds together.

The modern form of childhood represents a life stage, where a kid’s life is timeless and freedom of play is done with imagination (Cross, 1997). This notion of childhood started in the Victorian America Era at the end of the nineteenth century, 1875-1915 (Schlereth, 1991, p.275). Prior to the introduction of childhood as an age of creativity and innocence, the child grew up learning lessons in preparation for adulthood. In nineteenth-century rural America, children started working on the farm at young age, in some cases as early as five years old (Independence Hall Assoc., 2014). The stereotype of the rural past presents a hardworking youth with little time for play who is educated by a teacher lacking a formal education in a one-room schoolhouse. In most ways, this is an accurate view, but children did have time to play as well as have more advanced schooling opportunities in mid-19th century rural central Pennsylvania.
Schooling

Prior to the 1830s, formal schooling opportunities were rarely found in rural communities. The majority of children received no formal education, learning instead from their families on the farm (Vitello, 2007; Schlereth, 1991, pp. 274-276). In addition, education was primarily vocational and verbally taught as books were a rare item in the home (Schlereth, 1991, pp. 274-276; Vitello, 2007). In the early 18th century, most of the schools that did exist in the rural areas were religious in nature. Many church leaders saw childhood education as the best way to keep church values alive, creating a place where children could learn moral principles and church practices without straying from the religious path (Independence Hall Assoc., 2014). Religious ties to all education started to break down when Pennsylvania passed the Common School Act in 1834, starting the state’s public education program (Vitello, 2007). Each county was broken down into a school division and each township or borough became its own school district. It was mandated that each school district have a school, bringing one-room schoolhouses to the rural communities (Vitello, 2007).

The introduction of the one-room schoolhouse presented a dilemma for the rural farming communities, because it took away the children who were learning vocational skills and contributing their labor to the farm. Shortly after the Common School Act was passed, Pennsylvania senate leader Samuel Breck suggested that the statewide curriculum at rural schoolhouses should contain a mix of academic training and farm practical skills. This policy was enacted to ensure the children were still learning about farming as well as the basic academic knowledge that the Pennsylvania House and Senate felt all children needed in order to create a “literate and informed electorate” (Vitello, 2007). The schoolhouses in rural Pennsylvania were surrounded by land that the boys would work, helping the teacher with labor and learning essential skills (Vitello, 2007). In a single decade, from 1840 to 1850, the number of schools in Pennsylvania nearly doubled (Vitello, 2007, pp. 29-32).

Around this time, higher education was introduced to the region. In 1855, the Farmers’ High School was founded in Pennsylvania’s Centre County, which lay adjacent to Huntingdon County where
Daniel Massey lived. Founded as an agricultural school, the Farmers’ High School of Pennsylvania served as a higher education facility to promote the field of agricultural sciences (Waldhier, 2016). The students were required to perform manual labor in service to the school (Figure 7). The school, although labeled a high school, had the power to grant baccalaureate degrees providing college-level education to rural Pennsylvania farm families who previously did not have access to higher education (Waldhier, 2016). The school became the state of Pennsylvania’s Land Grant Institution in 1862, which aided the school in its agricultural pursuits (“Our History”, 2018). In 1874, the school became the Pennsylvania State College, and later the present-day Pennsylvania State University (Waldhier, 2016).

Figure 7: Students working the fields at the Farmer’s High School in 1857 (Waldhier, 2016).

From Homemade to Factory – Product

Prior to and throughout much of the nineteenth century, especially in rural areas, the main form of childhood entertainment came from toys made in the home. Dolls were made from old clothing that no longer fit or corn husks from the harvest. Mothers and grandmothers fashioned clothing for the dolls as
gifts for special occasions (Cross, 1997). In comparison to modern times, childhood of the past is seen as a “less-commercialized youth” where toys were homemade and repaired (Cross, 1997). Toys were rare and few toys existed in the rural areas of the country. Those that did exist, parents would buy from local stores or in farming equipment catalogs that contained toy sections (Belluscio, 2011; Cross, 1997). When a child would get a new toy in the nineteenth-century, it was a special day, because most of the toys were given on birthdays, Easter, or Christmas (Cross, 1997). Most of the toys children received were age-appropriate and educational. Girls received domestic-themed toys. The baby doll was the most popular, because parents and society thought it would train them to be good mothers. Meanwhile, boys were often given their first children’s tool kit and construction supplies to help them learn skills for their future (Cross, 1997). Prior to the industrialization of the toy industry in the 1890s, toys were handmade and expensive, making them very rare on rural Pennsylvania farmsteads (Cross, 1997:12; Belluscio, 2011; Herlocher, 2005). With the second industrial revolution from 1870-1914, the toy industry developed, and family-centered society began to change into a more materialistic-driven consumer society (Cross, 1997).
Artifacts from the Massey Field Excavations

Slate Pencils

Figure 8: Slate pencil found on Scare Pond Farm.

This slate pencil (Figure 8) was found at Scare Pond Farm. The slate pencils is an important artifact that is linked to the rural schooling system. Slates and slate pencils were often given to children to aid learning at home and promote literacy (Bunow, 2009, p.6). Imagine a child using this slate pencil to complete schoolwork under the low light from a kerosene lamp after a long day working in the fields.

Marbles

The marbles found on the Massey sites are crafted from unglazed earthenware, shown by the red-ceramic marble and glass, shown by the blue glass marble, in Figure 9 (Samford, 2002). The clay earthenware marble pictured is not from one of the Daniel Massey sites; however, it is an accurate depiction of the marbles at Scare Pond Farm. Marbles are symbols that show a type of child’s play on the farm. There were three main types of marble games that children played outside: hole games, chase games, and circle games ("Marbles", 2018). Children even gave the marbles nicknames according to the various sizes: kabolaa, the largest marbles, and pewees, the smallest marbles ("Marbles", 2018). Clay marbles were produced earlier in the nineteenth-century, while the industrial revolution paved the way for
the manufacture of glass marbles in a cheaper, more efficient way (Samford, 2002). During the 19th century, Germany was the lead manufacturer of marbles and applied new industrial methods in the latter half of the century (“Marbles”, 2018; Samford, 2002). The blue glass marble pictured on the right (Figure 9) is a manufactured glass marble, made in the early twentieth century (Samford, 2002).

![Figure 9: Marbles found on Pennsylvania farms.](image)

The Doll

Girls did not have baby dolls until the 1820s. Before the 1820s, dolls were created to look like miniature versions of adults (“The Mechanics of Dolls”, 2005). In fact, many of the early nineteenth-century dolls were made for adults instead of children (Cross, 1997). The popular fashion dolls of the nineteenth-century were made from porcelain, composite, or bisque. Bisque was typically only used in the head of the doll. The body was constructed out of fabric with the hands and feet made out of composite. Composite is a wood-based material held together with sawdust or resin (Herlocher, 2005, p.399). Dolls from Europe, were sought after in the nineteenth-century, as they were a doll for a higher status society. These dolls were expensive and made mainly for adults (“The Mechanics of Dolls”, 2005).
Germany was one of the main producers of dolls for nineteenth-century America, as the Germans had made dolls since at least 1413 (“The Mechanics of Dolls”, 2005). Joann Daniel Kestner Jr. (JDK) was a highly esteemed German doll maker and famed for his bisque baby dolls, which were shipped around the world (Herlocher, 2005). Kestner was known for producing dolls for many American companies, including Sears and Macy’s. Another German company who marketed dolls in America was Hertwig and Company Dolls (Herlocher, 2005). Hertwig and Company Dolls created an exclusively American line of bisque dolls with their head and limbs made from bisque and their bodies from Nanking cotton. Due to their construction, these dolls were named Nanking dolls (Herlocher, 2005). The doll pieces from the Massey Site (Figure 10) are very similar to the Hertwig Nanking doll design (Figure 11), as you can see by comparing the doll parts in Figure 10 to the doll in Figure 11.

**Figure 10: Doll parts found on the Massey Site.**

**Figure 11: Hertwig Nanking Doll (Stewart, 2014).**
The Wagon Wheel

In the latter half of the nineteenth century, cast-iron manufactured toys, such as horses and wagons, became popular. The miniature cast-iron replicas of trucks, wagons, horse-drawn carriages, and even pony express mail carriers enthralled many young boys (Cross, 1997). They represented a bit of reality that could be used in conjunction with the child’s imagination to initiate play and learn about future vocations (Cross, 1997, pp. 10-12; Belluscio, 2011). Over time with improved industrial production, the cost of these toys became affordable and was within reach of middle class family households, such as the Massey family (Figure 12). In addition, toys were often marketed in catalogs, making them more accessible to the rural Pennsylvania communities (Cross 1997, Belluscio, 2011). The cast-iron material, which is presumably the material used in the wagon below, became more affordable for the masses and replaced the old standard of making tin-plated toys (Cross, 1997).

Figure 12: Cast - iron toy wagon wheel found at the Massey Site.
Chapter 4

Food Rots

After an afternoon trip to the local grocery store, there is a new bushel of green bananas sitting on the kitchen counter. A few days pass and the bananas are in perfect, edible condition—a pale, sunshine yellow. If not eaten within a day or two, the bananas start to become speckled with brown spots, a result of their prolonged exposure to the atmosphere. A few more days, the yellow in the bananas is completely gone and they become soft to the touch. If this process were to continue, in a short time the integrity of the fruit would be compromised. Mold would thrive, making the bananas completely inedible. In just over two weeks, a fresh fruit becomes garbage. Why? Because food rots.

All food once harvested enters into a natural state of decay. While some foods are slower to deteriorate, other foods rapidly progress to an inedible state if actions are not taken to preserve them. Today, we have inventions, like the refrigerator and the freezer, that help keep food fresh longer. However, before the introduction of the household refrigerator in the 1920s, people had to rely on other processes to preserve produce, dairy products, and meats (DuPont, 2007).

In the 18th century, food was preserved in a number of ways: pickling, salting, smoking, and sugaring (Lindsey, 2017). These early food preservation techniques were time-consuming and required help from the entire family (Swank, 1943). Often, rural communities used less labor-intensive means of preserving foods with springhouses. A common 19th century farm building, the springhouse was a small structure built near a water source, constructed to channel water inside the building, chilling the foodstuffs inside (McMurry, 2012). Often, the farmer placed milk or other food within stoneware crocks, chilling them in the springhouse water (Figure 13) (Swank, 1943, pp. 60-61; McMurry, 2012). The antiquated country springhouse helped preserve food by cooling, much like our refrigerator. It is important to note the use of the stoneware crock in conjunction with the springhouse, as the stoneware
crock became an essential container for its food preservation ability (Swank, 1943, p. 60).

Figure 13: The inside of a springhouse (Swank, 1943).

**The Utilitarian Vessel**

Stoneware was the primary utilitarian vessel, in most American households in the 19th century. The process used to produce stoneware had been brought to the colonies from Europe. While Europeans had some stonewares that were decorative, American stonewares were crafted with the sole purpose of being used in the home (Greer, 2005). The white clay that was used in stoneware production was not widely found in the United States. Luckily, this clay was discovered in New Jersey and Long Island, which were the two primary shipping centers for the fine, white clay used across the country (Stewart & Cosentino, 1977). Stoneware is created by firing the clay at a high enough temperature for the clay to liquefy, or vitrify, so that when it is cooled down the clay is impermeable (Greer, 2005). Stoneware became known for its tough exterior and impermeability, making stoneware containers perfect for liquid or solid food storage.

Popular from the mid-eighteenth century until the early twentieth century, American stoneware ceramics were common household items because of their durability and multipurpose use (Stewart &
Archaeologically, stoneware pots and jugs are the most common ceramic artifact found in American historic sites (Horn, 2005). Stoneware was made into a variety of jugs, pots, crocks, and flasks, and decorated with diverse designs. One of the most recognizable stoneware was produced from white clay and decorated with cobalt blue patterns, sometimes with added popular oriental motifs (Horn, 2005).

The Introduction of Home Canning

The food preservation industry changed in 1795 when Napoleon’s army was suffering from spoiled food at the frontlines. Napoleon issued a challenge with an offer of 12,000 francs to invent a way to preserve food for his troops (Lindsey, 2017; Boyd, 2011). Nicholas Appert accepted the challenge and began to research heat and its link with airtight container storage, a process creating the “hermetically sealed container,” meaning that germs were kept out (Lindsey, 2017; Boyd, 2011). In Appert’s process, the food that was to be canned would be heated first, which would kill the bacteria, and then placed in an airtight glass container (Lindsey, 2017). The first canning process was completed in 1809, marking the start of a new era of food preservation (Lindsey, 2017). Appert’s glass containers were not suitable for wartime transport though, creating a need for a safely transportable container. Englishman Peter Durand created the tin can just a year after Appert’s successful canning experiment (Boyd, 2011). Canning food in tin cans was an expensive process that created a consumer niche for military suppliers, making tin-canned foods popular in America during the Civil War (Boyd, 2011). Shortly after the end of the Civil War, the Mason jar was patented in 1858, providing a more affordable way to can goods for the rural farmer (Lindsey, 2017).

The most popular food storage container from the end of the nineteenth century to modern day is the “Mason” jar, uniquely defined by its zinc threaded screw cap and glass container body. Mason jars were the staple of America’s food preservation industry and helped rural central Pennsylvania preserve
food for sale at local markets and to consume during the year. Women were in charge of the canning on the farm (Jenson, 1980). In recognition of the importance of canning jars to the home, companies began producing their food in glass mason jars in order to appeal more to consumers (Lindsey, 2017).

The Massey Family Collection

Stoneware

Stoneware containers were very popular used primarily for food preservation and preparation. Looking into a kitchen recipe book in the nineteenth century, recipes called for preparation to be done in a stoneware dish. The stoneware dish was a versatile material that enabled food to prepared and heated within the same container. Many homemade pie recipes were prepared, cooked, and served in stoneware dishes (Corbett, 1985).

Found in the Scare Pond Farmstead excavation, the stoneware pieces (Figure 14 & Figure 15) display the traditional Albany glaze (brownish-red) inside of many stoneware piece. On the outside, it is finished with a Bristol glaze (yellowish-white). The vertical shaped sides of the piece indicate the sherd is part of a stoneware crock.

Figure 14: Stoneware sherd found at Scare Pond Farm, interior, birds-eye view.
The Mason Jar

This zinc threaded screw Mason jar lid (Figure 16) became popular in the early nineteenth century as the earlier shoulder seal lid containers were phased out (Lindsey, 2017). The proper name for the cap below is called the bead seal jar, named for the ledge that was designed amongst the threads, eliminating the weak points for which its predecessor, the shoulder seal lid, was criticized (Lindsey, 2017). The bead seal jar became the sturdiest, most stable canning jar on the market, which added to its popularity among consumers (Lindsey, 2017).
The Lightning Type Canning Jar

A jar that was initially designed as a drinking jar, the lightning toggle jar is defined by its two center bumps, called a cover groove, which held the metal lightning clasp. In 1875, these jars were designed and patented by New York native Charles de Quillfeldt (Lindsey, 2017). These jars became popular for fruit canning because of their “lightning fast” closures that made the canning process easier (Lindsey, 2017).

From Stoneware to Tupperware

With the advancement of food preservation techniques, the necessity for stoneware containers faded. At the end of the Second World War, frozen foods became popular. Refrigerators and freezers were in eighty percent of American homes by the 1920s (Krasner-Khait, 2011). Today, it is common to find plastic Tupperware containers used to store leftovers in the refrigerator. Reused takeout containers from restaurants represent the modern day version of the stoneware crock, the American household vessel.
Chapter 5

A Witch’s Brew

If a child gets sick today, the child’s parents make a quick visit to the grocery store and pick up Tylenol Cold, Motrin, or Robitussin – a variety of medications approved by doctors to fight the common cold. If the child’s condition worsens, the child’s parents can quickly bring the child to a hospital where proper medical help can be administered. Modern times are a time of huge technological advancements, especially in the field of medicine and general health. In nineteenth-century rural central Pennsylvania, the field of medicinal health was arcane. The modern view of the past, a traveling doctor visiting patients in his horse and buggy carrying the few medicines available in his black bag, is an accurate representation of medicinal health in the 19th century. However, the nineteenth-century was a time of improving medical knowledge and doctor education in America.

Medicine in 19th century America was characterized by the view that the body’s natural state was in a state of equilibrium and balance with its environment (Jones & Turner, 2004). There are two other core beliefs that influenced medical practice in the nineteenth-century: 1) illness was caused by an unhealthy environment; 2) the body could be cured by regulating the inputs and outputs to the system (Jones & Turner, 2004). Following these “laws” of medicine, doctors in the first half of the nineteenth-century focused medical care on fixing imbalances within the body (Jones & Turner, 2004). This led to mercury-based prescription drugs such as calomel to act as purging agents, as well as bloodletting to purify the body of contaminants, supposedly “correcting” the balance of equilibrium (Jones & Turner, 2004). These practices, not surprisingly, did little to help and contributed to a high mortality rate in early nineteenth-century America. In fact, the growing mortality rate in America did not stabilize until the 1870s (Haines, 1994).

During the 19th century, the residents of Pennsylvania lived through major outbreaks of typhus, yellow fever, smallpox, cholera, typhoid, and influenza (Tully Historical Society, 2018). These
epidemics, widely publicized in historic records, are not the main cause of death for the majority of people living in 19th century America. In fact, the high mortality rates are associated with the common illnesses such as the cold, referred to as winter sickness; the measles, a leading cause of infant mortality; and fevers from childbearing (Schumann, 2001). Due to the vast array of illness and diseases of the nineteenth-century, education for physicians was important if there was to be a decrease in the increasing mortality rate. Particularly at risk were high-risk groups like young children and the elderly.

**Education of American Physicians**

Other doctors trained new doctors as apprentices, but the availability of a good doctor was rare in this time. Many universities that taught medicinal practices were over the seas in Europe, so only the privileged could gain a good education (National Library of Medicine, 1976). Most individuals who wanted to be doctors were not fortunate enough to gain a formal education and learned from other practitioners or through their own trial and error efforts.

John Morgan and William Shippen, both graduates of Edinburgh University in Scotland, founded the first American medical school at the University of Pennsylvania in 1765 (National Library of Medicine, 1976). Shortly after this first medical school was established, other schools were sequentially founded at King’s College (modern-day Columbia University) and Harvard (National Library of Medicine, 1976). As formal education in medical studies became increasingly available, the demand for practitioners to go to these new schools caused the tuition to drop in order to promote enrollment. However, the laboratory and research sections of these institutions in America were vastly behind those of Europe. This caused below-average physicians, alumni of the new American medical schools, to join the workforce (National Library of Medicine, 1976).

Throughout the nineteenth-century, well-known research institutions with state-of-the-art laboratories were all located in Europe. Paris, France boasted the top medical training in their hospitals at
the beginning of the 19th century (National Library of Medicine, 1976; Jones & Turner, 2004). Later, in the years following the Civil War, many Americans departed for Germany and Austria to attend internationally successful medical institutions (National Library of Medicine, 1976). The American medical field started to develop when a significant number of physicians returned from European medical institutions and began teaching in their home front (Jones & Turner, 2004). Following this wave of American medical training, scientific research in the medical field advanced. Universities started to pair with hospitals. The first hospital residency program was opened at Johns Hopkins Hospital in 1893 (National Library of Medicine, 1976). It took nearly the entire nineteenth-century for United States research in medicine to become internationally recognized.

**Home Remedies**

For many Americans, especially citizens living in the countryside, doctors were costly and access to a doctor with good accreditation was rare. Due to the lack of qualified physicians, home remedies became the primary way individuals treated their illnesses (Schlereth, 1991, p. 283). Each region of the United States had their own home remedies that were customized for certain illnesses. The Midwest was famous for its purge remedy that included eating prunes, bran, and natural laxatives to clear the body out (Schlereth, 1991, pp. 283-284). There were also over-the-counter patented drugs that people could buy and use in their homes. Some of the nationally recognized brands included: “Fletcher’s Castoria, Pinkham’s vegetable compound, Doan’s Liver Pills, Hall’s Catarrh cure” (Schlereth, 1991, pp. 283-284).

Medical information had to be broadcasted to the public, not just to doctors, because physician appointments were rare. Instead of hearing the doctor’s advice during an appointment as we do today, the people in the 19th century read medicinal almanacs that were distributed free to the public or read information in other news outlets (Schlereth, 1991, pp. 283-284). Occasionally, word-of-mouth information among neighbors about particular medicines was considered a reliable source and led to the
purchase of medicine in bottles like those found on the Massey Site (Figures 18-21). There was no labeling listing ingredients prior to government regulation of medications in 1906. Many of the available medicines contained alcohol, opium, and opium derivatives such as codeine, laudanum, and paregoric (Schlereth, 1991, p. 284). In the event that a doctor moved to a rural area, he could charge a large fee. Indeed, the money a patient could provide dictated the level of care they received (Jones & Turner, 2004).

**The Massey Farmstead Archaeological Collection: Medicine Bottles**

Medicine Bottle 1: “Quarter Pound Syrup of Wild Cherry & Tar”

![Image of medicine bottle](image-url)

*Figure 18: Embossed bottle pieces, embossed with “Pound Syrup of Wild Cherry & Tar.”*

This medicine bottle is shaped in a classic design for the late 19th century with its rectangular paneled shape and embossed label. The embossed label and shape identify this bottle as a medicine container (Lindsey, 2017). It is highly probable that the medicine from the bottle was a privately owned medicine, bought without a formal script from a doctor (Lindsey, 2017). Wild cherry syrup and tar was a common cure for most colds and coughs. Manufacturers claimed it cures even advanced whooping cough. It is seen as a ‘cure-all’ remedy for any ailment of the lungs and throat (Lindsey, 2017).
Medicine Bottle 2: Unlabeled Rectangular Base Bottle

It is evident that the unmarked bottle (Figure 19 & 20) found on the excavations is also a medicine bottle, because it has a narrow neck and thin rectangular body. Most often, these bottles are referenced as “short neck panels” or “panels” by glassmakers (Lindsey, 2017). Medicine bottles during the 19th century had long narrow necks and were closed off with a cork. The narrow neck prevented the
medicine from evaporation, which was likely to occur with medicines during the time. The majority of the medicines during the time were alcohol-based making evaporation a concern (Lindsey, 2017).

Medicine Bottle 3: “R.C. & C.S. CLARK CHEMISTS”

![Figure 21: "R. C. & C. S. Clark Chemists" embossed medicine bottle.](image)

This medicine bottle (Figure 21) from the Massey Site is another example of patient medications available at local general stores without a doctor prescription. Similar to other medicine bottles on the Massey Site (Figure 18), the rectangular construction and embossed label identify this glass bottle as a late-nineteenth century medicine container (Lindsey, 2017).
Chapter 6
Leisure on the Farm

Television nights, late night drinks, mid-day listening to music on the radio – these are some of the ways we entertain ourselves in the twenty-first century. Movie nights are no longer a drive away, but a couple of clicks of the remote controller and a newly released film starts playing in our family room. Technology has brought modern-age entertainment to the home at the click of a button. Furthermore, the rise of the family room has created a space where the whole family can be entertained in the home. What would the farm families in 19th century Pennsylvania do to entertain themselves? How would they entertain on the farm?

Today, nineteenth-century rural life is portrayed as a hard life. The farm family tended the fields all day with little downtime for entertainment. In addition, rural central Pennsylvania is seen as isolated from the pleasures of the city. This area was connected to other towns and major cities through the rapidly growing network of roads and rail lines. Farmers would travel to local markets in tourist villages where the community would gather to sell produce, exchange goods, have civic meetings, and buy objects brought by shipment from the bustling cities (Gimber et. al., 2014). To understand the entertainment and social divide that the nineteenth century witnessed between the farm and city dwellers, it is important to first look at the place where all social life originates: the home.

A Room to Entertain: The Family Room

Stemming from Great Britain's original influence on colonial American society, the formal parlor was a key part of all colonial America homes — it was a space for courting, weddings, baptisms, and entertaining visitors who would come to stay with the family (McMurray, 1988). In the formal parlor, it was the women’s sphere to show off artwork and musical talents, as high-class parlors often contained a
piano for courting occasions (McMurray, 1988). Traditionally, children were kept out of the parlor space when it was used for entertainment and men and women participated in different activities (McMurray, 1988). The introduction of the parlor on the rural farmstead created a space that was used very little due to its formal nature. The parlor was a wasteful space on the farm, because rarely were social interactions in need of the more urban formal entertainment room.

In rural society, the close-knit family unit mingled together (McMurray, 1988; Schlereth, 1991). Informal sitting rooms, in lieu of a parlor, became popular in farm homes. No longer would there be a formal gathering space in rural society. Instead, the whole family would gather to entertain, creating a leisure space within the home. Women and men gathered in the space engaging in the same activities of conversation, reading, or music (McMurray, 1988).

Reading was an extremely important part of leisure time. Women and children read in their leisure time to learn or simply enjoy their free time (Schlereth, 1991). Children would read to the family as well as participate in games that were played in the sitting room, including means not limited to dominoes, checkers, cards, and chess (Schlereth, 1991). This space was a first look into the modern-day concept of a family room, as the sitting room in rural homes was a place inclusive to the whole family, from the young child to the elder grandparent (McMurray, 1988).

**Socializing Outside the Home**

In the rural areas, a break from work was not as easy to come by as the sun and the season ran a farmer’s life. In a personal account from Miss Nettie Spencer who grew up on a farmstead in 1870, social life for her family and neighbors was organized around the church camp meetings, where young people would meet and court to marry. They also celebrated the Fourth of July in which the whole town would gather for the spectacle and a parade would retell the history of American independence (Walker, 1938). Other accounts of rural life mention that socializing outside the home occurred during town celebrations.
or when courting commenced at town meetings (Gimber et. al., 2014). Socializing outside the home in early nineteenth-century rural America was relatively limited, but overtime organizations formed that broadened rural community interaction in a new way, such as the agricultural fair (Kyle, G. & Chick, G., 2002).

In 1851, the Pennsylvania Agricultural Society organized the first Pennsylvania Farm Show. This farm fair highlighted the latest technology, and included educational exhibits, farm animal competitions, and markets (Gimber et. al., 2014). The Pennsylvania Farm Show was a yearly exposition of the state’s greatest achievements in farming and provided a space for socialization among the rural communities. The Pennsylvania Grange Fair, another agricultural fair in central Pennsylvania, started in 1874 as a gathering of local residents to familiarize themselves with the Grange organization (Mincemoyer, 2014). The Pennsylvania State Grange was an organization founded to improve the life of rural Pennsylvania farmers. The Grange Fair became the social high point of the year, providing information exchange vital to the rural communities in central Pennsylvania (Mincemoyer, 2014). One of the longest lasting grange fairs, the Centre County Grange Fair, has continued to the present day, remaining an important agricultural fair in Pennsylvania (Mincemoyer, 2014).

**The Rise of Leisure Time**

The latter half of the nineteenth-century saw the rise in leisure time for the average American. In the cities, labor unions formed and put pressures on companies to define a sustainable work week. As a result, the daily work hours for most were defined from nine to five, and Saturdays became half-days for the laborers (“America at Leisure”, 2018). Cities provided more family-friendly leisure activities and retreat resorts that supported the ideals of a Christian American lifestyle began to flourish (Uminowicz, 1992). Most of these resorts provided an opportunity for the middle or upper class American to go away on holiday and escape from the everyday. The Victorian Period (1876 - 1915) saw the growth of
vacations with the entire family. In the country within rural communities, the mechanization of farming allowed for more efficient farm practices creating more opportunities to relax (Schereleth, 1991). With the rise of recreation in rural communities, the entertainment that had existed in the cities started to make its way out into the countryside, most notably the radio in the early twentieth-century (Schlereth, 1991; Brunner, 1935). The radio was ultimately the invention to help bridge the gap of awareness between rural and urban communities in America.

The Archaeological Record: Entertainment on the Daniel Massey Sites

Harmonica Reed

Figure 22: Harmonica reed found at the Massey Site.

Music was an important component of household entertainment. As pianos were popular among the urban elite, smaller instruments made their way onto the farm, most notably the harmonica (Schereleth, 1991). The harmonica above (Figure 22) is an example of mass production reaching the central Pennsylvania communities. Harmonicas were popularized around the time of the Civil War, as soldiers on both sides of the war could easily carry harmonicas in their pockets (“The Harmonica,” 2001). German, Matthias Hohner, created a global harmonica company that mass-produced the harmonica at the end of the nineteenth-century (Ternisien, 2013). The Hohner Harmonica Company made the instrument
available to the public through order-by catalogs by the 1890s (“The Harmonica,” 2001). Many nineteenth-century Americans played the harmonica and smoked tobacco. In fact, President Abraham Lincoln showcased the importance of these hobbies when he writes to the Hohner Harmonica Company, stating that his two favorite hobbies are playing his harmonica and smoking a tobacco pipe on his porch (Ternisien, 2013). This example (Figure 22) is a reed fragment from the internal structure of the instrument. The original reed would have contained ten slits to be able to play a full scale on the instrument (Ternisien, 2013).

Kaolin Pipe Parts

![Kaolin Pipe Parts](image)

Figure 23: Kaolin pipe parts found at the Massey Site.

The kaolin clay pipe fragments found at the Massey Site show how widespread smoking was in nineteenth-century America. Men, women, and children would take up the “art of tobacco drinking” as a form of entertainment, originating in the colonial period (“Clay Trade”, 2018). The colonists learned how to smoke tobacco from the Native American tribes during the colonization of the New World (“Clay Trade”, 2018). The types of pipes found in the excavations date after the 1860s, identified by their simple design and lack of decorative features (“Clay Trade”, 2018).
This stoneware pipe found at the Massey Site is a classic reed-stem clay tobacco pipe that was typical of the nineteenth-century (Murphy & Reich, 1974, pp. 52-60). This pipe is similar to a Mogadore Hexagonal Stemmed Milled Chesterfield pipe that was popular in the late nineteenth-century (Murphy & Reich, 1974, p. 54). The Akron Smoking Pipe Co. organized in the late 1880s manufactured the Mogadore Hexagonal Stemmed Milled Chesterfield pipe. This company manufactured a large number of smoking pipes for the Northeast region (Murphy & Reich, 1974, pp. 58-60).
Chapter 7
Museum Design

The Daniel Massey farm sites are located in present day Stone Valley Recreation Area, which is home to Penn State Shavers Creek Environmental Center. As part of the center’s recent renovations, the Discovery Room is being redesigned to create a space for children and families to enjoy. Among the new exhibits, a timeline, spanning from geological formation of the land to modern day, will wrap around the Discovery Room wall. Next to a fireplace in the corner of the room, there will be an exhibit connected to the timeline on the historic settlement of the Stone Valley area.

In preparation for this exhibit for Shavers Creek, Dr. Claire Milner and I met with the Shavers Creek staff: Lucy McClain, Joshua Potter, and Doug Wentzel. We discussed possible exhibit ideas and the space we would have to work with. The exhibit needs to fit a 4 ft. wide space on a wall. Next to the fireplace, we discussed placing a table coming 2 ft. out from the wall. The plan is to create an exhibit on the Discovery Room wall. We will use bricks to build a false house foundation, leaving places to put artifacts. In addition, the table will be used to place 3D printed artifacts on to make the exhibit hands-on.

In designing a possible exhibit, I researched the artifacts from the Massey sites and the best ways to educate children in an informal learning setting. I synthesized the research from Gail Ringer’s “Designing Exhibits for Kids: What are We Thinking?” and Heather Zimmerman and Lucy McClain’s “Exploring the Outdoors Together: Assessing Family Learning in Environmental Education” to come up with “Do’s” and “Do Not’s” when designing an exhibit geared towards educating families.
The “Do’s” and “Do Not’s” to Children’s Exhibit Design

Do’s

- Be cautious of the vocabulary you are using. Use a varied vocabulary, but with everyday words.
- Allow for a mixture of adult and child related activities. Let the child use their own curiosity to guide them, and give the accompanying adult clear directions.
- Allow for questions and activities that encourage parent/child cooperation.
- Provide “tools” for discovery.

Do Not’s

- Try to “dumb things down” for children. They are smart. They know it.
- Attempt to direct a child’s imagination. Instead, allow for open-ended questions and thoughts.
- Confuse culture and history when designing an exhibit, as differences in historical time changes often confuse a child more (Zimmerman & McClain, 2013).

In assessing the “Do’s” and “Do Not’s” to make a museum design, I have created an exhibit proposal for the historic settlement exhibit at Shavers Creek Nature Center. The “tools” that I want to provide for discovery, in reference to the “Tool First, Discovery Second” model, are 3D printed versions of artifacts (Zimmerman & McClain, 2013). In this model, children are most likely to pick a tool first, and use the tool to make a discovery. For example, in Zimmerman and McClain’s article (2013) a child reaches for a magnifying glass so they can discover a flower. I plan to use the 3D printed artifacts to spark curiosity and allow the families to piece together where the object belongs in the picture of the past.

Following the “Do’s” and “Do Not’s” of museum design, I have created a possible museum exhibit text for the historical display on the Massey family. The exhibit laid out is titled “Lighting up the Past: Life in 19th Century Central Pennsylvania.”
Lighting up the Past: Life in 19th Century Central Pennsylvania

A world without television for entertainment. No public schooling systems. Only horse and hand power worked the land. Life 150 years ago in central Pennsylvania was very different than it is today. Explore the life of Daniel Massey and his family as we uncover the artifacts from his farm homes in Stone Valley to discover more about life in 19th century rural central Pennsylvania.

A Farmer Family’s Story

The year was 1830. Daniel Massey and his family lived on a farm right here in Stone Valley. The forest looked a bit different than it does today, as there were little trees. The land was cleared for farming and charcoal production, as Pennsylvania was one of the top agricultural states in the nation. Observe the objects on the table and link them to the Massey Family’s story.

In the brick wall, there will be the real artifacts for observation. Coming out from the wall will be a small table for the 3D printed artifacts. Objects include a piece of lamp glass, a slate pencil, a Mason jar lid, a small medicine bottle embossed “Wild Cherry Syrup & Tar,” and a harmonica reed. On the wall will be text clues that the children can match to the objects on the table. The text clues will be lifted up, in “wooden pull windows” to reveal the item and a description about a facet of nineteenth-century life.
Life on the Farm

Hint – on outside of pull window –

“In your daily life, I help you see. I am a…”

Answer: Lamp

Before the 1930s, there was no electricity on farms in rural Pennsylvania. Daniel Massey and his family needed to use kerosene lamps to see. They did most of their farm work during the day. At night, the lamps, like this one, would help kids do their schoolwork or read books. While the children used the light to learn at night, the adults used lamps around the house to entertain guests in their sitting rooms. Imagine reading a book or doing homework with only lamp light, do you think it would be hard?

Through the Eyes of a Child

Hint – on outside of pull window –

“What in school or at home, you cannot write without me. I am a…”

Answer: Slate Pencil

Slate pencils were important to help educate the children in the nineteenth-century. Many parents gave their children slate pencils so they could do their lessons. During the day, children went to school at rural schoolhouses. In fact, the first schools in Pennsylvania were only one room. In these one-room schoolhouses, children learned how to read, write, and do math problems while also learning how to farm. Did you know? Children, not only studied from books, but they also helped their teacher farm his land.
**Food Rots**

Hint – on outside of pull window –

“So your food does not get gross, use me to help preserve it. I am…”

Answer: Mason Jar

Mason Jars became popular 150 years ago because they could keep food from rotting. The Massey family had a large garden and farm where they would grow fruits and vegetables. The family grew the foods they ate, so their meals were farm fresh. When the Massey’s would have too many vegetables to eat, they sealed them in jars and sold them to make money. They also made jams to sell. Could you imagine making your own jams to spread on your toast for breakfast?

**A Witch’s Brew**

Hint – on outside of pull window –

“If you get sick, I can help you out. I am…”

Answer: Medicine Bottles

Doctor’s visits were rare in rural 19th century Pennsylvania. The Massey family had to go to local general stores to buy remedies. Many of these medicines were mixed by people with little medical knowledge, so it was not always safe and probably did little to help people feel better. The Masseys owned many medicine bottles like this one. This medicine was made from wild cherry tar. What sickness do you think a wild cherry tar medicine would help fix? Hint: It can help this, if it has a tickle. (Answer: a sore throat)
Leisure on the Farm

Hint – on outside of pull window –

“If you need a tune, you got me. I am a ...”

Answer: Harmonica

Harmonicas were popularized during the Civil War when soldiers carried them in their pockets and played them when there was time to relax. After the war, many people in rural America could buy harmonicas because they were cheap and easy to transport. In a time with no TV, the harmonica would be the nightly entertainment for families. Imagine your father playing the harmonica for your family in your kerosene lamp-lit sitting room. The sitting room was also a place for chess, checkers, and domino games. Every night could be family game night on the farmstead.

Relive History on the Trail

Daniel Massey owned two farms close to Shavers Creek Environmental Center. If you want another adventure, take your learning to the trail and see where the Massey family farmed, learned, and lived. While you are on the trail, keep an eye out for these key things about each site. Try to discover more about the life that Daniel Massey lived.

The Massey Site:

Be an Archaeologist.

Penn State archaeologists uncovered Daniel Massey’s farm in two summers. When they first found the site, they were looking for signs of human effects on the environment. Look to see if you can discover the things the archaeologists found when they uncovered the Massey Site.
1) This farm site was Daniel Massey’s home. Can you see the foundations of his home?

2) Farm homes were typically only a few rooms and had basements to store food. Daniel Massey’s house had three rooms. Can you find all three?

3) In addition to the home, the Masseys had a garden where they would grow their fruits and vegetables. The archaeologists found many Mason jars as the Massey Site, so we can tell they stored a lot of their extra food from the garden. Where do you think the Masseys would have built their garden?

4) On Pennsylvania farms, there were many other buildings built. One other building was the privy or out house. Many times people would throw broken objects like toys and bottles into the privy. Can you guess where the privy might have been? What object would you think the Massey’s would have put in the trash?

Scare Pond Farm:

Scare Pond Farm is Daniel Massey’s second farm, but he did not live there. We think that a tenant farmer lived there and worked the farm for him. A tenant farmer is a farmer who borrows land from the owner and pays them part of their crops to live on the farm and work the fields.

Be an Archaeologist.

Penn State archaeologists came to this site to look for clues of a farmhouse. Look for the items below.

1) At this site, the archaeologists found the basement of the house. Can you find where the house used to be?

2) On the farm, the animals needed a place to live. At Scare Pond Farm, there is evidence of a barn. Look around the site and see if you can find the place where the barn would have stood.
3) To store their food, the Masseys chilled it in a building called a springhouse. A springhouse is a small building built over a stream, so that the stream can cool the food inside. Can you find the stream the farmers used to build their springhouse?

The Wrap-Up

The goal of this thesis is about educating people on an area of history that is relatively unknown. In researching rural 19th century central Pennsylvania farm life, I learned that there are many misconceptions about this time. These misconceptions tell of a romanticized, hard-working farm life away from the corruption of the city. However, roads, rail lines, and river transportation, widely utilized in the early 1900s, created a vast network for farmers in central Pennsylvania. The agriculturalists in Pennsylvania were quickly working to make a profit and relying on neighbors to provide a social community. Although some of the cities’ pleasures were lost to the rural areas, many items such as the harmonica, fashion dolls, and kerosene lamps made it out to the countryside.

In educating the public about 19th century rural life, I highlighted objects from the Massey collection in the exhibit design that best displayed misunderstood facets of the time. The artifacts used in the exhibit, a lamp, a slate pencil, a mason jar, a medicine bottle, and a harmonica reed, all highlight a different view of 19th century life. The research from this project will be given to Dr. Claire Milner and the Shavers Creek Staff. This thesis provides essential information in the creation of the future exhibit in the Shavers Creek Environmental Center Discovery Room that will share more stories about 19th century rural central Pennsylvania life.
BIBLIOGRAPHY


Renck, A. W. (2002). The agrarian myth; how has it affected agricultural policy? Presented at Western Agricultural Economics Association Annual Meeting: Long Beach, California. Transcript retrieved from https://ageconsearch.umn.edu/bitstream/36568/1/sp02re01.pdf


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PROFESSIONAL EXPERIENCE
Penn State Department of Geography  August – December 2017
Researcher on Remote Sensing Team – Advised by Dr. Guido Cervone
- Studied California drought using Landsat and NASA Giovanni; scripted and modified R code to calculate NDVI rates and analysis data; prepared poster for Undergraduate Poster Exhibition

MARQ: Archaeological Museum of Alicante, Alicante, Spain  March – May 2017
English/Spanish Interpreter
- Translated and edited translations of the museum documents; educated museum guides in English

Texas Tech University Maya Archaeology Field School, Chan Chich, Belize  May – June 2016
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- Oversaw five excavation units on the project; explained archaeological basics to high school students

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- Curated museum collections and provided input in the creation of new exhibits

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