Homeschool Day Adult Guide

How to Use this Guide

This guide is designed to enrich your visit to the estate and to provide supplemental information about George Washington as a farmer and entrepreneur, and about the lives of the enslaved people who lived and worked on the farms. The questions will encourage discussion and exploration during your visit. Suggested answers to each question are included to help you facilitate learning among the children in your group.

To continue the learning experience beyond your visit today, activities are available on Mount Vernon’s website, which includes activities and worksheets.

The places you will visit today correspond with their locations on the Homeschool Day explorer’s map. We encourage you to visit the stops on the farm in the order listed.

Introduction

George Washington held many important roles including military leader and president, but he saw himself first as a farmer. Although George Washington began renting Mount Vernon from the widow of his older half-brother, Lawrence Washington, in 1754. He did not officially inherit the plantation until 1761. Washington devoted as much time as possible to turning Mount Vernon into a self-sustaining farm and a thriving business, even though he was often away in service to his country.

Washington’s farming and business interests were vast and diverse. Whenever possible, Washington searched for ways to produce everything he needed right here at home. He was interested in improving efficiency, and conducted experiments accordingly. He increased his farm acreage and investigated the best ways to grow more crops. He had outbuildings built for transforming raw materials into useable goods, and he diversified his business interests into fishing, milling, and distilling. By the time Washington died in 1799, Mount Vernon was 8,000 acres – a massive and successful enterprise.

Keeping Mount Vernon productive and successful depended on the labor of hundreds of individuals, most of whom were enslaved workers of African descent. At the time of George Washington’s death, there were 317 enslaved individuals living and working at Mount Vernon. The enslaved community was large and diverse, consisting of men, women, and children who lived on all five farms and performed a wide variety of jobs tasks. Those living at Mansion House Farm worked in the Mansion as servants, such as chambermaids, valets, and cooks. Other individuals were skilled in trades such as spinning, carpentry, and blacksmithing. Enslaved individuals on outlying farms, such as Silla and her children, worked as laborers to cultivate and harvest Mount Vernon’s crops.
Stop A: The Farms at Mount Vernon

Mount Vernon was once made up of five farms: Union, Dogue Run, Muddy Hole, River, and Mansion House. The areas of Mount Vernon that you are visiting today are part of what was Mansion House Farm. This demonstration site recreates one of Washington’s outlying properties where most of his enslaved workforce lived. The outlying farms were also where most of his crop cultivation and experimentation took place. View the map of the five farms on the panel by the site entrance to see their locations.

George Washington grew tobacco as his “cash crop” for many years at Mount Vernon. However, his cash crop eventually changed to wheat because it was less labor intensive, it did not take nutrients out of the soil like tobacco did, and he could make more profit from selling wheat products. In addition, during the colonial era, Great Britain did not restrict wheat trade in the same way as it did tobacco. Washington believed that farming was very important for the prosperity of the new country, and that the United States had the potential to become a “granary to the world,” because land was one of America’s most accessible resources.

**Why was switching to wheat a smart move for Washington?**

Switching from tobacco to wheat was a good decision for several reasons. First, wheat could be ground into flour, which could be sold for a high price. Second, tobacco is very tough on soil. Over time, it drains the nutrients out of the soil and makes it harder for plants to thrive, causing the farms to be less productive. Wheat is much easier to grow, is gentler on the soil, and required less human labor to produce.

Stop B: Bake Oven

This clay oven represents one of the most popular styles of ovens used in England and America during Washington’s lifetime. In the 18th century, ovens like this were seen at military forts, plantations, and merchant mills (which were large buildings that held machines to grind wheat into flour for sale). Mount Vernon is a plantation and Washington owned a merchant mill, so it seems likely that he might have had a similar oven at one of his farms.

To make bread, the baker opened the metal door and built a large fire inside the oven. It usually took 3-6 hours to preheat, depending on the weather. When the oven was hot, the baker shoveled the fire out and put the bread in. The baker could tell the temperature of the oven by doing the “flour test.” He or she tossed a handful of flour midway into the oven after the fire was removed and wait to see how long it took the flour to start to burn. If it took 5-8 seconds, the baker knew the temperature was perfect for baking bread! Because the walls of this oven are thick, it stays hot for a long time – long enough to bake up to three batches of bread before another fire had to be lit. An oven this size could fit 20-30 loaves in each batch. So a baker might be able to make 60-
90 loaves just from one fire!

If Washington did own an oven like this, it was likely used to make bread for the hired white workers. This would have been “brown bread,” a mix of wheat flour, rye flour, water, molasses, salt, and yeast. Most people in early America ate brown bread. Washington himself ate white bread, which was baked in the brick oven inside the mansion kitchen. Most white people in 18th century Virginia probably ate bread almost every day. Enslaved people typically received cornmeal instead of wheat flour, and did not have access to ovens. Instead, they made cornmeal pancakes called hoecakes, or they baked cornbread by wrapping the dough in leaves and burying it in the coals.

Stop C: Fishing

Rivers were the highways of the 18th century. There were very few roads and they were not always safe or reliable, so people often traveled by water. Although today we see very few boats on this part of the Potomac, in Washington’s time it would have been filled with vessels sailing up and down the river. Many large plantations like Mount Vernon were built on rivers so that goods and crops produced there could be moved easily to market for sale in the United States, Europe, and the West Indies.

During the spring, the water of the Potomac River began to warm and fish such as shad and herring returned to spawn (lay eggs) in the upper parts of the river. In the writings of the day, there were references to the surface of the water “sparkling like silver” as millions of fish moved upriver. Washington set up a successful fishing operation on the Potomac. The income derived from the sale of the salted fish often accounted for half of the annual revenue for the estate. The spawning season was brief, only four to six weeks. Consequently, they had to work around the clock to catch, clean, and salt pack the huge quantities of fish in order to preserve them. This was very labor intensive. During those weeks, all other work at Mount Vernon stopped. Every enslaved person that could be reassigned, worked on the fishing operation.

Did you know?
In one year, Mount Vernon’s enslaved workers brought in over 1 million fish, which were preserved with salt and then stored in large barrels. The fish were used to feed Mount Vernon’s residents, guests, and free and enslaved workers. Washington also sold the preserved fish in cities along the east coast of the United States and in the West Indies.

Discussion questions:
What important role did the river and the wharf play at Mount Vernon?
The Potomac River connected Mount Vernon to the outside world, supplied the estate with one of its most important food sources, and provided Washington with one of his most successful business ventures. Washington’s goods could easily move on the river in both directions. He imported finished goods from across the globe and exported flour and salted fish from his estate. Additionally, the fish from the river were a staple in the diet of the enslaved workers.
**How did the fishing operation contribute to making Mount Vernon self-sustaining?**

Like the other farm operations that made Mount Vernon self-sustaining, the fishing operations cut down on the amount of materials Washington had to purchase from the outside world. Feeding the hundreds of workers at Mount Vernon could have been very expensive for Washington, but the supply of shad and herring caught during the fishing season served as a major contribution to the enslaved workers' rations.

**Explore! Visit the salt house at #20.**

**Stop D: Fences**

When it came to fencing, George Washington was ahead of his time. Not only did he use fences to keep deer and other wild animals away from his crops, fencing was also part of his plan to keep the soil healthy. By fencing the livestock in fields of grass, he used their manure as a natural fertilizer to enrich the soil. Each type of fence had its own purpose. Fences were sometimes built by ditchers, such as Joe who worked on Mansion house farm, or enslaved children between the ages of 11-14. Building fences was a winter task due to less crop-focused work that time of year.

**Types of Fences**

- **Spilt rail** fences were movable and used primarily around fields. Their flexibility allowed them to be laid around trees and other obstacles, a tremendous advantage.

- **Wattle** fencing was tightly woven to pen poultry, and to protect them from foxes and other predators.

- **Post and rail** fences were used to permanently mark boundary lines and keep large animals like horses in specific fields.

- **Hurdle** fences were small and portable, and used primarily to keep sheep in an area for grazing. The manure they left behind was valuable fertilizer.

- **Hedges** are “live” fences which might be plants such as honey locust, willows, thorns, or other types of shrubs. Washington attempted to replace his expensive wood fences with hedges so dense that they would turn away all animals, from the smallest rabbit to the largest deer. Despite his repeated directions to plant the banks of the ditches with fast-growing locust and willow, he never succeeded in fully protecting his garden harvest with live fences.

- **Ha-ha walls** were not technically fences, but functioned similarly. At most plantations, natural views could easily be destroyed by the fencing necessary to keep farm animals away from the house and gardens. Washington’s solution was to use ha-ha walls, a common feature in British naturalistic landscape design. A ha-ha wall is a sunken wall with a lower level of ground the side where animals grazed. The wall served to keep
domesticated animals safely in the pasture, but their boundary was concealed. As a visitor looked away from the Mansion, they saw a pastoral scene with animals grazing in the distance, but the wall did not interrupt the view beyond.

**Explore!** There are many types of fences around Mount Vernon. Encourage your learner to look for them using their map and field guide. They can draw the fences they see.

**Stop D (continued): Fertilizers, Soil Enhancers, & Compost**

Always trying to perfect his farming techniques, Washington read that manure was a great fertilizer and he wanted to try it. Before adding it to crop fields or gardens, the dung needed to “cook.” Another name for this process is *composting*. People today might associate composting with using decomposing leaves and vegetable scraps, but in the 18th century manure and plant materials were used to enhance soil nutrients. General Washington had an open-sided structure built called “the Stercorary,” which is a fancy name for a very large pile of dung or manure. Many different animals contributed to the dung repository, which partially explains its location near the stables.

Enslaved women gathered and spread the manure on the fields. Their older children may have also hauled manure as part of their assigned plantation work.

Washington and other farmers of his time understood that by rotating crops their fields would not become "exhausted" or depleted of nourishment. Based on his studies of English farming methods, Washington expanded a three-year crop rotation into a seven-year schedule. Under this system, no crop, except clover or grass, was planted in the same field for more than one year in a row. Also by pasturing livestock on fields planted with grass, their manure helped to replace valuable nutrients in the soil. Buckwheat was plowed under while still green to serve as a natural soil enhancer, or "green manure."

Green manures were a new concept during Washington’s lifetime. Today we know them as nitrogen fixers. Gardeners and farmers use still use compost piles. They often prefer this rich and fragrant fertilizer to the chemical-based solutions sold in most stores.

An example of one field’s seven-year schedule: buckwheat, wheat, clover or grass, clover or grass, clover or grass, corn and potatoes, finally wheat.

**Explore! Visit the Dung Repository at #32.**

**Discussion questions:**

*Why do you think Washington chose this location for the dung repository?*

Washington experimented with the manure from many different animals on his farm, including horses. Since many of the horses were housed in the stables, this location for the dung repository may have been the most convenient. It is also located fairly close to the gardens, which used the manure as fertilizer.
**How is the dung repository an example of Washington’s innovation as a farmer?**

Part of what made Washington an innovative farmer was his willingness to experiment with new methods. The dung repository served as a place for Washington to experiment with the best combinations of manure to create the best possible fertilizer.

**Stop E: Textiles**

At this station is the equipment needed to make fabric for the clothing of the enslaved community and household linens. Much of the raw material used to make cloth also came from Mount Vernon. Fields of flax, which was used to make linen, grew on the outlying farms. About 1,000 sheep produced fleece that was turned into wool.

**Did you know?**

Sheep were sheared once a year in the late spring. The fleece had to be cleaned before it could be used to make wool cloth. After it was washed, the fleece was carded. Enslaved workers combed the fleece between brushes, called cards, to remove any leftover dirt and smooth the fleece. Finally, the fleece was spun on a spinning wheel that twisted the fiber into wool yarn.

In the 18th century, spinning thread and weaving cloth were time-consuming jobs done completely by hand. Spinning was most often done by enslaved women. Alce, Myrtilla, Kitty, and Winny were enslaved spinners at Mount Vernon. They used a large spinning wheel like the one you will see in the spinning house. We believe that much of the spinning happened alongside other tasks in the enslaved workers’ living areas. Weaving fabric, on the other hand, was usually a man’s job and often was done by hired workers after the Revolution. Before the war, two enslaved men wove cloth at Mount Vernon. They used a loom like the one you will see in the spinning house for weaving cloth. It took about 2.5 miles of thread to make a single square yard of cloth. In 1778 alone, 2000 yards of cloth were made here!

**How is textile production an example of Mount Vernon being self-sustaining?**

Textile production at Mount Vernon was largely dedicated to producing fabric to clothe the enslaved workers on the estate, who annually received one set of clothing for the winter, and one for the summer. By producing some of this material on the estate, Washington did not have to purchase it elsewhere.

**Explore! Visit the Spinning House at #18.**

**Stop F: 16-sided Barn**

Grain, the useful part of the wheat, must be separated from the stalk of the straw. The grain can then be ground into flour. Washington designed this 16-sided treading barn as a “machine” that would improve this process called threshing. Wheat was spread on the top floor where horses or mules trotted on it. The weight and friction from their hooves...
separated the grain from the stalk. Can you see the gaps in the floor? It was built that way so the wheat could fall to the floor below leaving the straw behind. The leftover straw could be used as bedding for horses or put into compost. Enslaved workers gathered up the wheat from the bottom floor, and then removed any dust or leftover chaff, which is the paper-like husk that surrounds each seed. Wheat is then separated from the chaff in a process called winnowing, where baskets or fans were used to blow air through the grain to remove the chaff.

Did you know?
The roughly circular shape created an easier path for the horses. This helped to keep the horses moving, which prevented them from urinating since they cannot do so while in motion. This kept the grain clean and dry. This 16-sided Barn is a replica of the original, which was located on Dogue Run Farm.

Discussion questions:
*How does Washington’s design for the 16-sided barn demonstrate innovation as a farmer?*
Washington was always looking for ways to increase his farms’ production, while decreasing time and labor. The traditional way of separating wheat grain from the stalk, using a flail, was very labor intensive and took a lot of time. The 16-sided barn was an innovative way to complete the same process, but it processed more wheat in less time.

*What do you think he meant?*
*A granary is where wheat is stored, and Washington believed the United States could be a “granary to the world.”* What do you think he meant?

Stop H: Enslaved Foodways

Children and the elderly probably cooked a lot of the food that the enslaved people at Mount Vernon ate. The working adults and older children (ages 12 and older) did not always have time to cook because they worked sunrise to sunset. On the farms, each family cooked for themselves. They used the fireplace in their cabin or they cooked at communal fire pits like the one demonstrated today. They usually made simple meals, like soups and stews, because they did not have many pots and pans or other cooking utensils.

Washington provided food rations, or set amounts of food, to the enslaved people. Most of the time, he gave them cornmeal and salted fish or pork. Sometimes, he also gave them buttermilk, molasses, salt, and several kinds of fresh and salted meat. Still, the enslaved did not have a lot of variety in their food, so they probably tried to be creative about cooking and finding new ways to serve the same ingredients.

While the rations provided the bare minimum of calories needed for the day, they were not always filling and did not provide a wide range of vitamins and minerals. To supplement, enslaved families raised gardens, kept chickens, trapped small animals, and searched the woods for edible wild plants. Often, the gardens that enslaved families
grew had vegetables and fruits that their ancestors had grown in Africa. Eating African foods helped them keep some of their traditions and culture alive.

What is a tradition that your family has about food?

Stop G: Slave Cabin

More than half of Mount Vernon’s enslaved workforce lived and worked on Washington’s outlying farms as field laborers. The majority of field workers were women. Those who were able worked from sun up to sun down, six days a week, planting, cultivating and harvesting Washington’s crops. This reconstructed cabin shows the living conditions of families on Washington’s outlying farms. It consists of a single room with a clay floor, a fireplace, a root cellar, and a loft above. The wooden walls were daubed with mud to keep out the elements.

Meet Priscilla and Penny

Priscilla, also called Silla, worked as a laborer and plow woman on Dogue Run Farm. She was married to Joe, who worked as a ditcher on Mansion House Farm. Together, Silla and Joe had at least six children, including 10-year-old Penny, who lived with Silla in a cabin similar to the replica you see today. To see his wife and children, Joe had to walk several miles both ways from Mansion House Farm to Dogue Run Farm. Silla and her children belonged to General Washington, and were eventually given their freedom under the conditions of Washington’s will. Joe, however, belonged to the Custis estate, and remained in slavery after Martha and George Washington’s deaths.

Discussion questions:

What challenges would an enslaved family face living in a cabin on an outlying farm?

Working as a laborer on an outlying farm was back breaking work. The cabins were very small, with only basic furniture and pallets on the floor for sleeping. In addition, the families who lived in cabins like these were often separated from other family members. For example, Joe, whose wife and children lived in a cabin like this on Dogue Run Farm, only saw his family on Sundays, when he had no assigned labor. He walked several miles in order to see them. The inability to choose who they lived with and where they worked illustrates that lack of freedom that invaded so much of their daily life.

Explore! Learn more about enslaved individuals and their communities by visiting the Greenhouse Slave Quarters at #11-14 and Lives Bound Together exhibition at #46.

Activities & Worksheets

Continue the Learning at Home

Visit Mount Vernon’s website for more worksheets and activities related to today’s activities: www.mountvernon.org/HomeschoolDay.
George Washington was a progressive farmer who experimented with growing over 60 different crops at Mount Vernon. He was one of the first farmers to realize that tobacco depleted the soil and in the mid-1760s, he switched to wheat as his primary cash crop. Washington was not the first farmer to use crop rotation, but he was one of the first to develop and use a plan of more than 3 years.

Fill in the crop rotation schedule below using the following guidelines:

- Only “Clover or Grass” may be planted more than 2 years in a row.
- “Corn and Potatoes” can never be planted after “Wheat”.
- “Buckwheat for Manure” can only be planted in 1 field every year.
- “Wheat” must be planted in 2 fields every year.

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# CROP ROTATION ANSWER SHEET

Crop Rotation schedule used by George Washington at Mount Vernon

Complete the crop rotation schedule

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Make Your Own Fence

Just like today, fences were used for different purposes in the 18th century and were made of different materials. Some fences were used to keep animals out of gardens or to keep livestock safely penned. Fences had different elements, such as how they were built or the materials they used, to serve their purpose.

You can make your own model fence at home by using supplies you have available. Before you get started, think about what you plan to make.

- What do you need a fence for? Maybe a pet or a garden? Or maybe a fictional character?
- Did you see any fences at Mount Vernon that you’ll use in your model?
- What elements of those fences would make them effective for your project?

Once you think through those questions, begin gathering your supplies. Here are examples of materials you can use: sticks from outside, toothpicks and marshmallows, popsicle sticks, modeling clay, or Legos.

Start building your model fence. You can build a fence that is like one you saw at Mount Vernon, combine elements from different fences that you saw, or invent a new type of fence!

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Fences at Mount Vernon

- **Spilt rail** fences were movable and used primarily around fields. Their flexibility allowed them to be laid around trees and other obstacles, a tremendous advantage.

- **Wattle** fencing was tightly woven to pen poultry, and to protect them from foxes and other predators.

- **Post and rail** fences were used to permanently mark boundary lines and keep large animals like horses in specific fields.

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