Archaeological Study of Pioneer Forts

Objective: This lesson will help students understand the connection between archaeology and the life at various pioneer forts in western (now West) Virginia. Students should obtain a better understanding of how these forts were designed, defended, and provided shelter for the militia and pioneers.

GRADE LEVEL
Eighth Grade

TIME REQUIRED
Five class periods

STRATEGIC VOCABULARY
archaeology
archaeologist
artifact
militia

GUIDING QUESTIONS
1. What was the need for forts during the Dunmore’s War/American Revolution periods?
2. What were the time periods these forts were built?
3. What were the designs of the forts?
4. Who built these pioneer forts?
5. What does archaeology reveal about these forts?

LESSON ACTIVITIES
1. A teacher introduction to the era, the strategic vocabulary, and what the lesson plan entails should take place. The era includes Dunmore’s War and the Revolutionary War period. Captain Arbuckle built Arbuckle’s Fort after a plan previously recommended by George Washington during the French & Indian War. McCoy was a lieutenant then a captain from 1778+. Andrew Donnally was a captain (1776-1778), lieutenant colonel (1778-1780) and then County Lieutenant (1781). Andrew Donnally was one of the wealthiest and most influential residents of Greenbrier County, Virginia. Forts were near a permanent source of water, such as a spring or creek, and were built on a high ridge close to nearby trails or roads. Teachers: Fort Donnally is the site of Dick Pointer, a slave, holding off a Shawnee Indian attack in May, 1778, and being known as the “hero of Fort Donnally.”
2. Divide students into groups and assign the following articles. Once students have the following articles, have them create an outline of their article. The articles are Frontier Defense [http://www.wvencyclopedia.org/articles/2075](http://www.wvencyclopedia.org/articles/2075), McCoy’s Fort [http://www.wvencyclopedia.org/articles/2417](http://www.wvencyclopedia.org/articles/2417), and Arbuckle’s Fort [http://www.wvencyclopedia.org/articles/266](http://www.wvencyclopedia.org/articles/266) by Kim McBride and Stephen McBride. Other articles at the same website are [Fort Donnally](http://www.wvencyclopedia.org/articles/2417), [Pricketts Fort](http://www.wvencyclopedia.org/articles/2417) by Melissa May, [Forting](http://www.wvencyclopedia.org/articles/2417) by John M. Boback, [Dunmore’s War](http://www.wvencyclopedia.org/articles/2417) by Philip Sturm, and [The Revolutionary War](http://www.wvencyclopedia.org/articles/2417) by Richard O. Curry.

3. Student groups should then make a presentation of their outlines to the class. Classroom discussions may occur.

4. In order for students to understand the widespread use of pioneer forts have students go to the Interactive Mapping at [e-WV](http://www.wvencyclopedia.org/maps), then choose History, then select the map titled, “1750-1792 Frontier Defense”. Have students consider why there are two periods of fort construction and where the forts are located. They should formulate the ideas that the frontier was moving westward and that more settlers were living over a wider geographic area of western Virginia.

5. Students should compare the time periods of 1750-1792 by looking at the Interactive Timeline at [http://www.wvencyclopedia.org/timelines](http://www.wvencyclopedia.org/timelines) and take note of what activities were taking place that directly affected the frontier area of western Virginia and its inhabitants.

6. The teacher should then display on the Smartboard the following pictures in the pdf file attached to this lesson plan. These pictures show various artifacts that were discovered at various archaeological digs at Arbuckle’s Fort, Donnally’s Fort, and McCoy’s Fort. Have students make a list on paper of their “First Impression” of what they are seeing as each picture appears.

   The teacher should then show each picture in order again and have the students discuss what they think the pictures shows before the teacher tells them what is actually in the picture. The following is a list of the different pictures’ information.

   1. **Aerial photo** of Arbuckle’s Fort, Greenbrier County -- This photo, taken from a plane, shows the outline of the stockade walls after excavation. The fort is diamond shaped with bastions at the north and south ends. The bastions are areas that jut out and allow the militia men to “cover” the walls, or shoot down along them.

   2. **Line drawing** of Arbuckle’s Fort, Greenbrier County -- This map shows the layout of Arbuckle’s Fort, and where different types of gunflints – F for French, G for Gray European, and L for local cherts, were found within the Arbuckle’s Fort site. Sometimes exactly where something is found is very important, and in this case may reflect militiamen positions. So this information must be recorded very precisely during the excavation.

   3. **Gunflints**, one with lead patch -- These gunflints, found at Arbuckle’s Fort, would have been used by the militia in their flintlock rifles, to create the spark to set off the powder charge which sent the lead ball flying out of the gun barrel. It is interesting that these gunflints are very small and almost used up; the one in the top left even has had a lead patch to hold it tightly in the gunlock. Letters from the 1770s tell us that the Greenbrier settlers were often running short of gun powder and other supplies, to the point of worrying they might have to abandon the Greenbrier Valley and go back to the eastern settlements.
(4) **Liberty seal** -- This small glass artifact was found at Arbuckle’s Fort. It might have been mounted in a cufflink, or in a frame to be attached to a string around the neck. It imprints the word “Liberty” when dipped in wax.

(5) **Liberty seal printed in wax** -- This word “Liberty” reminds us of the importance of the frontier defense during the American Revolution in the fight for independence from Britain. Matthew Arbuckle, founder of Arbuckle’s Fort, expressed this sentiment in a 1776 letter to Col. William Fleming, as follows,

> “Sir, My country Shall Never have to Say I Dare not Stand the Attacks of the Indians or fly the Cause they are So Justly fighting for, on the Contrary I will Loose the Last Drop of My Blood in Defense of My Country when fighting for that Blessed Enjoyment Call(d) Liberty….”

(6) **Amulet with an “X”** -- Found at the blacksmithing area at Arbuckle’s Fort, this artifact suggests the presence of an African-American blacksmith. Artifacts with Xs carved into them have been found on many slave cabin sites, and are typically interpreted as a sort of amulet or good luck token, within the Bikongo religious system of West Africa. The X within a circle-like object symbolizes the cycles of life and movement from the physical to the spiritual world.

(7) **Arbuckle’s Fort Line Drawing** -- Dr. Stephen McBride made this drawing based on archaeology. The separate area for cooking, where the kettle us shown, is based on finding lots of cast iron kettle fragments, and animal bones from cooking in that area. The blacksmithing forge area is based on finding bits of “slag,” the leftovers from blacksmithing, here. The two-story building in the center is the blockhouse, where the militia might have stayed or things would have been stored. The internal stockade wall is very unusual, and why or when it was built is not totally understood.

(8) **Donnally’s Fort, Greenbrier County: Chimney** -- This foundation to a double chimney was the first thing found in the archaeology of Donnally’s Fort. It matches the descriptions of Andrew Donnally’s house that were generated by the 1778 battle. The larger opening would have been for the kitchen room, as most cooking would have been done over a fireplace.

(9) **Donnally’s Fort Daub, Nails, and Lead shots** -- The lead shot may have come from the attack on Fort Donnally, while the nails and daub (sun baked clay used as chinking) relate to the stockade walls.

(10) **Donnally’s Fort Delft and White Salt Glazed Stone** - These ceramic artifacts attest to the domestic life at the Donnally house and fort. Andrew Donnally was very wealthy and likely had more of these items than many settlers.

(11) **Donnally’s Fort Plan Map** -- This map shows the layout of Donnally’s Fort, which is somewhat regular in having two bastions, like at Arbuckle’s Fort, but is unusual in having the Donnally house incorporated into the fort, serving somewhat like a 3rd bastion.

(12) **Donnally Fort Privy Pits** -- Two small pits found in one corner of Donnally’s Fort likely served as a privy – or outdoor bathroom. These would have been needed as sometimes it was too dangerous to go outside the fort.

(13) **Donnally Fort Bastion** -- The dark stain is the outline of the trench dug for the stockade walls. This photo shows the formation of a square bastion, where the militia would have positioned themselves so to be able to shoot down along the side walls of the fort. The pile of stones may represent support for a post that was part of a raised shooting platform.

(14) **Donnally Fort Key** -- This large skeleton key found at Donnally’s Fort could be from the front door. Stories about Donnally’s Fort mention that the front door of the house was the front door of the fort – these stories helped the archaeologists to find the outline of the fort.
(15) **McCoy’s Fort Lead Shot and Gunflints** -- These artifacts from McCoy’s Fort are typical of artifacts found on fort sites. The lead balls could have been used by militiamen. The gunflints would have been used by the McCoy family and militia in their flintlock rifles to create a spark to set off the powder charge needed to send the lead ball out of the gun barrel.

(16) **McCoy’s Fort Ceramics** -- These ceramics from McCoy’s Fort are typical of the kinds used in the early to mid 19th century, and help us understand this fort was also a domestic residence, like many of the fort sites. The types are from left to right, of types called “sponged,” “transfer printed”, and “handpainted.” Archaeologists usually find only fragments of things that were thrown away or lost.

(17) **McCoy’s Fort Foundation and excavated interior with pits and central stone support** -- The limestone pieces seen here outline the walls of McCoy’s house/fort. Only the northern chimney can be seen, but there was a chimney on the south end too, shown in image 19 below. The large pits in the center were likely dug for storage of foodstuffs, and would have been covered by a trap door.

(18) **McCoy’s Fort Lice Comb, Pipestem, Bead, Metal Coin Buttons** – These artifacts from McCoy’s Fort relate to the personal needs of the inhabitants. The metal buttons attest to the presence of clothing, and the glass bead to the fact that some clothing could be quite fancy. The lice comb, which is made of animal bone, attests to the needs for hygiene. The clay smoking pipe stem attests to one of the more common leisure activities, smoking tobacco. Only the more durable artifacts survive, while things like fabric or paper would rot in the ground. So what is found is only a sample of what was originally there.

(19) **McCoy’s southern chimney base** – This chimney was found on the southern end of the McCoy’s house/fort. It is the pattern of the roughly laid stones that helped the archaeologists figure out this was a chimney.

(20) **McCoy’s Fort log structure and damaged barn**— Here the original McCoy house/fort, made of logs, is shown being used to store hay, and enclosed within a later frame barn, which is about to fall down after being hit by several wind storms. Eventually both the frame barn and the log fort had to be dismantled, but the logs from McCoy’s fort were mapped and numbered for eventual restoration.

7. **A Simulation Archaeological Dig:** The teacher may choose to simulate an archaeological “dig” by creating a large wooden box of soil and placing various pieces of broken pottery, small animal bones (chicken, etc.), pieces of metal, old bits of iron (such as from a cooking pot or nails) in it. Give the students rubber gloves, small brushes, and a framed mesh screen. Create a grid over the top of the wooden box by tacking string every six inches until you have six squared off areas of the box. Then students can be assigned to their grid and begin their “dig”. One student can document what is found by noting on their worksheet the location where the object/artifact was found.

**Other Sources:**
Illustrations provided by Dr. Kim McBride (Kentucky Archaeological Survey) and Dr. Stephen McBride (McBride Preservation Services)
SS.8.20: Demonstrate an understanding of the settlement of Western Virginia and the United States by Native Americans and Europeans.
   • Differentiate between the cultures and daily life of the Native Americans.
   • Summarize the history of European exploration and settlement in western Virginia from the first endeavor of John Lederer through the settlement period including Morgan and other important explorers and settlers.
   • Explain the role of western Virginia in the French and Indian War

SS.8.21: Demonstrate an understanding of the American Revolution, including western Virginia’s part in the development of the nation.
   • Compare and contrast the perspectives and roles of different western Virginians during the American Revolution including those of political leaders, soldiers, patriots, Tories/Loyalists, women and Native Americans.
   • Identify the key conflicts, battles and people of the American Revolution in western Virginia and their effects on the area (e.g., Battle of Point Pleasant, Siege of Fort Henry, Attacks at Fort Randolph and Fort Donnally).
   • Summarize events related to the adoption of Virginia’s constitutional conventions, the role of western Virginia and its leaders in the Continental Congress, and the ratification of the U.S. Constitution.
   • Explain the economic and political tensions between the people of western and eastern Virginia including the economic struggles of both groups following the American Revolution and their disagreement over representation.

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