

Asian inspired kilns in South Carolina?

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The 2011 University of Illinois field school focused on the Pottersville kiln site (38ED011) in the Edgefield District of South Carolina. The Pottersville kiln remains are situated on the highest elevated point of a field, surrounded by a surface scatter of ceramic sherds in all directions. The seemingly gentle slope of the kiln actually allowed for the passage of cooling summer breezes. Aided by the use of light-weight tents and plenty of cold water, the Illinois-based field school students fared well in the southern heat.

Pottersville is home to America's first alkaline glazed stoneware vessels. The alkaline glazing process developed by Abner Landrum at Pottersville replaced the need for lead and salt glazed vessels in South Carolina and remains a mainstay in modern day folk pottery. The *Camden Gazette* first wrote about the Pottersville vessels describing them as "the first of the kind" and "superior in quality" (1819:4-5). The high caliber of these vessels was later echoed by Robert Mills (1826) when he stated that the stoneware was "stronger, better, and cheaper than any European or American ware of the same kind".

About three years ago, with the support and guidance of Carl Steen, I began researching the Edgefield District and its outstanding pottery tradition. During the planning and preparation phase of the project we had planned to define the dimensions of the Pottersville kiln. Archaeological and archival research informed us that a "typical" alkaline stoneware kiln would be approximately 20-30 feet in length and 10-12 feet in width (Sweezy 1994; Zug 1986). While the kiln site at Pottersville has been known for decades, no one confidently knew which part of the hillside were kiln remains and which part was a waster pile. Without the assistance of geophysics, we began the project at the high point of the hill guided by stones just barely breaking through the topsoil. We felt that due to the elevation and prevailing winds this would be an ideal location for the kiln. We broke soil on the first afternoon of the field school and by the end of the day we realized that we were indeed on top of the kiln wall. The orientation of the wall was a bit different than we had expected; something we learned to get use to with this project. Using this same "exposed" stone methodology we inserted additional units down the hill and quickly learned that we were dealing with something much larger than we had planned.

Like all projects, the Pottersville kiln held many secrets until the final week of the field season and the project mantra became "Dig Deeper". By the end of the field season, we had discovered all of the major architectural features of a kiln; exterior walls to include all four corners; flues, firebox, bag wall, firing chamber, and chimney. The

Pottersville kiln does fall within the average for kiln width (12 feet wide) but the field school discovered that the kiln is a jaw-dropping 105 feet in length. The exterior wall is over 6-feet in height and the firebox is approximately 6 feet deep, 10 feet long, and 12 feet wide. The aforementioned first unit captured the left and right walls of the firing chamber. By the end of the second week the team encountered the chamber floor approximately 2.5 feet below surface level (bsl). After digging deeper and following the walls in search of terminal soil, we quickly realized that this 2.5 bsl level was the last floor utilized in the kiln and that the original floor was actually 5.5 feet bsl. We counted seven floor-building episodes in the chamber (see Figure 3); presumably due to firing difficulties or a whole host of different production factors.

By 1820, the Edgefield District was the third most populated region in the South and an "industrial" sized kiln would have been needed to produce the colossal amount of vessels needed to store food for Edgefield's enslaved population. For example, pork was the main staple of the diet and for just its pickling and storage, over 11,000 five-gallon vessels would have been needed (Burton 1998; Vlach 1990).



Figure 1: View of kiln from above.



Figure 2: View of kiln firebox from above.



Figure 3: The floor-building episodes in the chamber.

The length of Pottersville would have made it possible to produce the volume of vessels needed in the Edgefield District in 1820.

Archaeology never seems to provide the answers expected, if it did why would we dig? With the new information before us, a mountain of additional research begins—perhaps even research that takes a turn to Asian methods of production. For over 1,000 years potters in Asia have been firing ceramics in hillside kilns, most often referred to as Anagama, Dragon, or Snake kilns (Medley 1976). The enormous length of the Pottersville kiln opens a host of research questions; including those regarding the fueling of the kiln, the regulation of internal firing temperatures, and many more. Thankfully I have the good people of Edgefield and many other great supporters on my team as I move forward with my dissertation.

I would like to give special thanks to Beth Cali for allowing the University of Illinois to conduct the field school on her property at Pottersville, Carl Steen for being a sounding board (even if he thinks differently), Brooke Kenline (USC) for teaching the student survey techniques, Nancy Kempf and Madelynn McCarty — our South Carolina volunteers, the incredibly dedicated field school students, and the gracious and welcoming community of Edgefield!

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