



**ESTABLISHING A TEMPORAL DISTRIBUTION FOR CERAMICS OF THE
WASHINGTON COUNTY, UT VIRGIN RIVER BRANCH OF THE ANCESTRAL
PUEBLOAN**

**Crystal Spagnuolo (Dr. Brian Coddling; Kenneth Blake Vernon, MA)
Department of Anthropology**

Dating archaeological sites is important for establishing patterns in settlement, trade, resource use, and population estimates of prehistoric peoples. Using dated sites, we can see patterns in how a culture such as the Ancestral Puebloan went from a foraging subsistence to agricultural settlements with far-reaching trade networks. Or, we can understand when the Ancestral Puebloan abandoned certain areas of the American Southwest and pair this with climate data to understand how climate might be a factor. In order to do so however, we must first have a reliable timeline of these events, built from archaeological sites that are reliably dated. Unfortunately, direct dating via radiocarbon or dendrochronology is costly and not always possible due to the biodegradable nature of the organic materials needed for such dating. Using a relative dating system that employs ceramics is a cost-effective alternative.

Here I continue work begun by The Archaeological Center at the University of Utah to generate a ceramic dating system for the area encompassing Southwest Utah, focusing on Washington County, using extant site data from this region. While the prehistoric inhabitants of this area were Ancestral Puebloan, the ceramic traditions were separate, and therefore merit their own dating analysis (Lyneis, 1995; Spangler, Yaworsky, Vernon, & Coddling, 2019). Currently, dating of sites in the region is difficult, both due to the expense of direct dating techniques (radiocarbon and dendrochronology) and the lack of defined time periods for ceramics types.

The Virgin River Puebloan peoples were a sub-culture within the larger Ancestral Puebloan Culture Area of the southwest United States. As with the broader Ancestral Puebloan Culture during this time period, the Virgin River Pueblo were a sedentary population who utilized a mix of subsistence strategies. They grew maize, squash, and beans while supplementing their diet with wild plants and game (Lyneis, 1995).

Puebloan habitation sites in the Virgin River range from Late Basketmaker II Phase, with sites dating to as early as AD 50, until abandonment sometime between AD 1250 and 1300, at the terminal end of the Pueblo III period. However, ceramics weren't introduced to the area until around AD 500, marking the beginning of the period referred to as Basketmaker III (Spangler, Yaworsky, Vernon, & Coddling, 2019).

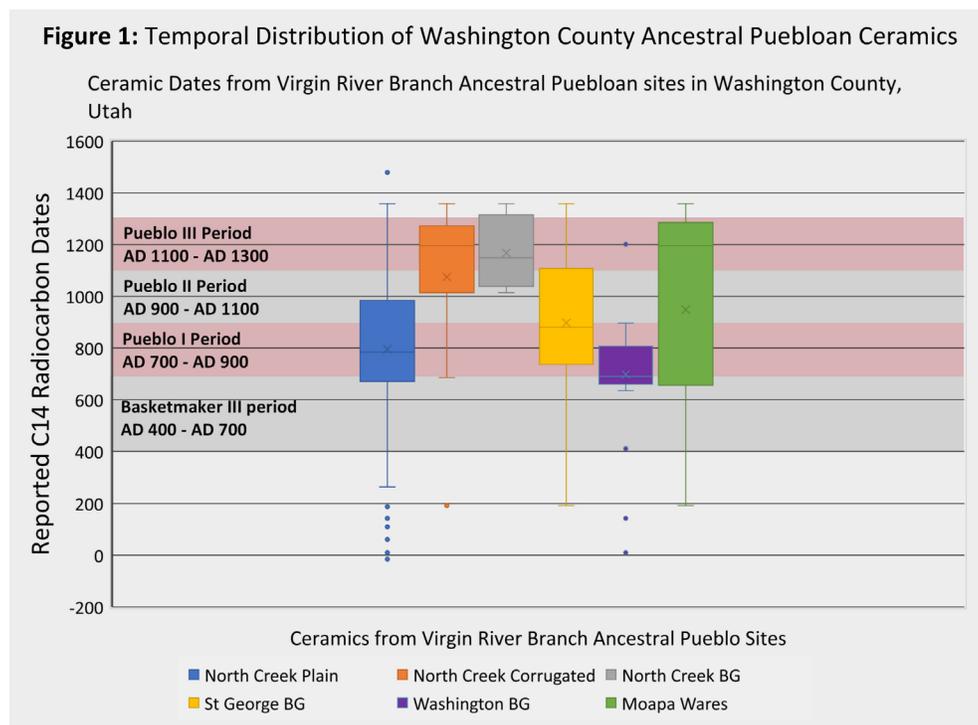
Ceramic traditions in the Virgin Branch Pueblo region are often referred to as "similar but different" from neighboring contemporaries, borrowing heavily from the Kayenta traditions living on the other side of the Colorado river (Spangler, Yaworsky, Vernon, & Coddling, 2019). Evidence from sites in the area, while similar to those nearby, show a distinctive difference in ceramic traditions from the greater Ancestral Puebloan Culture Area, including the absence of neck-banded jars during the Pueblo I Period (Lyneis, 1995).

Temporal data for the ceramics in Virgin River area are sparse, as few researchers have addressed this. In the 1950's, Harold Colton identified many of the ceramics seen in the area.

Colton assigns dates to some of the ceramics, but not all. How these dates are identified is unclear (Colton, 1955; Colton, 1952). Margaret Lyneis independently continued this work from the 1990's to around 2010 as part of her overall work on the Virgin River Ancestral Puebloan. Lyneis's work details ceramics made locally in the area. Her dates are broad period categories only (Lyneis, 2008). Recently, Roger McPeck has been working on a manuscript that details each known style and ware in the Virgin River area, however, he also declines to assign dates other than broad period categories to any ceramics (McPeck, 2017).

Using data from Washington County archaeological sites, I isolated sites with one or more common Puebloan ceramics or one non-local ceramic that were found in association with datable material. To limit over-broad results, I only used data for ceramics found in close relation to dated sample material. My results provide a clear temporal pattern for previously undated ceramics, with stepped date ranges, revealing utilization of Washington Black-on-Gray in early to mid Pueblo I period, giving way to St. George black on gray throughout the Pueblo II period, and finally transitioning to North Creek Black on gray toward the end of Pueblo 2 through Pueblo III.

The dates analyzed reveal the median dates of the ceramics and provides temporal windows for production and use (Figure 1). While some styles are continuous through habitation periods, there is strong evidence of temporal distribution patterns of Virgin River Ceramics. This pattern also establishes a timeline for previously undated ceramics. The median dates of the ceramics to are as follows: North Creek Plain AD 784, North Creek Corrugated AD 1195, North Creek Black-on-Gray AD 1149, St. George Black-on-Gray AD 880, Washington Black-on-Gray AD 690, and Moapa Wares AD 1195.



In this research, I have established a temporal model for ceramics found on sites that have had direct dating, to create a cross-reference that can be used by other researchers and archaeologists working in the Virgin River area. This research will help archaeological professionals narrow site occupation when direct dating methods are not possible. This will help build a better understanding of the prehistoric settlement patterns throughout the Puebloan world.

References

- Codding, B. F., Coltrain, J. B., Louderback, L., Vernon, K. B., Yaworsky, P. M., Brewer, S. C., & Spangler, J. D. (In Review).) Socioecological Dynamics Structuring the Spread of Farming in the North American Basin-Plateau Region. *Environmental Archaeology*.
- Colton, H. S. (1952). *Pottery Types of the Arizona Strip and Adjacent areas in Utah and Nevada*. Flagstaff.
- Colton, H. S. (1955). *Pottery Types of the Southwest*. Flagstaff: Northern Arizona Society of Science and Art.
- Lyneis, M. M. (1995, June). The Virgin Anasazi, Far Western Puebloans. *Journal of World Prehistory*, 9(2), 199-241.
- Lyneis, M. M. (2008). New and Revised Prehistoric Pueblo Pottery Wares And Types From North and West Of The Colorado River: Part 1, Gray Wares From The Western Area. *Pottery Southwest*, 27(1), 3-20.
- McFadden, D. A. (1996). Virgin Anasazi Settlement And Adaptation On The Grand Staircase. *Utah Archaeology*, 9(1), 1-34.
- McPeck, R. R. (n.d.). A Guide to the Ceramics of the Virgin Anasazi Region.
- Scott G. Ortman, E. L. (2005, May). *The Crow Canyon Archaeological Center Laboratory Manual, Version 1*. Retrieved 2019, from Crow Canyon Archaeological Center: <https://www.crowcanyon.org/ResearchReports/LabManual/LaboratoryManual.pdf>
- Spangler, J. D., & Codding, B. F. (2019). Washington County Archaeological Radiocarbon Database. Salt Lake City, UT: On file with University of Utah Archaeological Center.
- Spangler, J. D., Yaworsky, P., Vernon, K. B., & Codding, B. F. (2019). *Hisat'sinom of the High Plateaus: The Prehistory of Grand Staircase StaircaseEscalante*. Prepared For: Grand Staircase-Escalante National Monument, Kanab, Utah, University of Utah Archaeological Center.