

Longdale Iron Mining Complex: Mapping Community One

Archaeology 377

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-We would like to acknowledge Charles Mason (a.k.a. "O Captain, my captain) for his tremendous help on this project

Introduction

Founded The Longdale Iron Mining Complex is located in the George Washington National Forest in western Virginia's Alleghany County. In 1827, John Jordan and John Irvine of the Jordan and Irvine Co. purchased the complex and erected the Lucy Selina cold-blast furnace to process iron ore from the oriskany sandstone mined on the eastern slopes of Brushy Mountain. The smelted iron, refined into pig-iron bars at Clifton Forge, was then shipped to Richmond and Lynchburg to be distributed to northern cities such as Baltimore, New York, And Philadelphia. The Jordan and Irvine Co. dissolved in 1831, and Edwin and Ira Jordan, under the new title of B.J. Jordan and Co., became the sole proprietors of the Lucy Selina. However, in 1854, after William Firmstone introduced the more technologically advanced hot-blast furnace, B.J. Jordan and Co. abandoned the Lucy Selina for the more efficient hot-blast Australia Furnace. In 1870, Firmstone and his partner Ario Pardee formed the Longdale Company and purchased the Lucy Selina Furnace. After renovating the Lucy Selina into a hot-blast furnace, the Longdale Company continued its operations until its failure in 1911.

In the fall of 1991, Washington and Lee students performed preliminary archaeological surveys of community I at the Longdale Iron Mining Complex. Twenty-nine structures were identified and divided into four clusters according to physical attributes such as square footage, building materials used, distance from the creek, and whether the structures served industrial or domestic proposes. A rough map of the community was composed.

Due to the inconsistency of early maps and a need to locate all structures within community I, in the spring of 1997 students returned to the community to create a more precise map ~~using~~ utilizing a 100-foot tape measure and a Brunton compass. While three previously mapped structures were not found, four new domestic structures were discovered.

Fieldwork

A new map for community I was created using the pedestrian reconnaissance survey method and a map completed in 1991¹⁹⁹⁷. The drainage tunnel off mile marker twelve of State Route 850 was used as a datum point, and a hundred foot tape measure and a Brunton compass were used to take measurements and orientations from this point to structures A, 8 and 11. Measurements were then taken between structures using the tape measure and orientations were taken for structures in relation to each other. The dimensions and orientation of each structure were recorded and appear accordingly on our map, for which a 1:50 foot scale was used for greater precision. A protractor and a ruler were used to orient and accurately draw these structures on the map. Placement of the stream, drainage ditches, and route 850 were taken from the topographic map of the Longdale Furnace Quadrangle.

On May 14, 1997, 4 additional structures were identified in community I, labeled K, 30, 31, and 32. Structures H, I, and J, present on the 1991 map, could not be located. The absence of these three structures can probably be explained due to their location on a flood plain near Simpson creek. Heavy flooding in

Good insight.

recent years could have destroyed any previously existing structural remains. The new structures were recorded on our revised map of community I.

Structures 30 and 31 are domestic in nature, a discovery which was initially surprising as the structures are located within a primarily industrial cluster, cluster 3. 30 and 31 have dimensions and appearances similar to the domestic structures of cluster 1. Structure 32, ancillary to structure 8, is a double stone-lined pit. Structure K, located to the west of cluster 4, appears domestic in nature although all that remains of the structure is a pile of brick and stone rubble.

In conclusion, our map reflects the organization of community I's four clusters. Our thorough reconnaissance has produced four new structures as well as a more precise map of Community One. The map shows both accurate dimensions of each structure as well as accurate distances between structures. We hope this map will be helpful in the future of the Longdale project.