

The Tangible History of Amache, Phase VI: Archaeology Research Design and Methodology for Field Investigations, Summer 2018

Dr. Bonnie J. Clark (University of Denver, Department of Anthropology) with contributions by April Kamp-Whittaker (Arizona State University, School of Human Evolution and Social Change)

Research at Amache is driven by three goals: creating a rich educational environment, providing expertise in archaeology and museums to the local and descendant communities, and advancing scholarly research. These goals are accomplished through the development of a rigorous research design and clearly articulated field methods.

The National Park Service has identified over 100 sites related to the confinement of Japanese Americans during World War II (Burton et al. 2002). However, very few of those sites have been subjected to archaeological research. This is likely due both to their recent date, as well as their shadowed history. Prior to the DU Amache Project, the most in-depth projects undertaken have been done so by the National Park Service at sites with which they are associated, especially the internment camps of Manzanar (Burton 1996) and Minidoka (Burton and Farrell 2001). Other sites have been studied because of cultural resources management projects (e.g. Tamir et al. 1993) or as an element of graduate research (e.g. Branton 2004). However, as interest grows in the archaeology of World War II (Archaeological Institute of America 2011; Morine and Clark 2014), and in the archaeology of confinement (Casella 2007; Mytum and Carr 2012), the study of these sites is moving more into the mainstream of historical archaeological research. The DU Amache Project has been critical in highlighting not just the promise of this research, but also models for investigation. Faculty and alumni of the project will be contributing to an upcoming thematic issue of the journal *Historical Archaeology* on the archaeology of World War II. Field protocols established at Amache have been employed at other WWII sites by both colleagues (e.g. Stacey Camp at Kooskia, Idaho) and former students (e.g. Adrian Myers at Riding Mountain, Manitoba).

At the heart of the Amache field school lies an ethical commitment to true engagement with communities of concern. A host of scholars in anthropology (as reviewed by Low and Merry 2010), including many archaeologists (such as those in the edited works

by Colwell-Chanthaphonh and Ferguson 2008 and Little and Shackel 2007), regard such work as the future of the field. Indeed, several scholars suggest that field schools are the natural vanguard for such a paradigmatic shift (e.g. Silliman 2008). As Kent Lightfoot writes, collaborative field schools “provide a dynamic context to contemplate the significant issues facing the practice of archaeology today” (2008:126-127). The Amache field school is at the forefront of disciplinary change by emphasizing engaged and applied archaeology. It recognizes that many people, not just professionals, are central to heritage management.

Research Foci

Since its inception in 2008 the research objectives of the field school have centered around three primary domains: daily life, placemaking, and heritage as a process. Within those overarching foci, fieldwork has also been shaped to accommodate the data needs of University of Denver MA students. In addition, we have worked with many of the organizations involved in Amache’s preservation to investigate areas of the site slated for development and incorporated this work into student training and research.

Archaeology is particularly suited to address the quotidian, as habitual acts are often the ones most evident in the physical remains of the past (Lightfoot et al. 1998). In sites of institutional confinement, daily life takes on a particularly important role as individuals strive for normalcy (Casella 2007). At Amache, where entire families were incarcerated, internees felt the urgency to humanize their community. Thesis research on children in camp reveals a number of ways parents softened the incarceration experience for their children (Kamp-Whittaker 2010). Study of the distribution of ceramics and other artifacts related to food production indicates that women reclaimed their role as caregivers despite restrictions on cooking in the barracks (Shew 2010). Many of these ceramics derive from Japan, indicating significant internee investment in an identity for which they were being actively persecuted (Skiles and Clark 2010).

The corpus of work created by DU Amache graduate students contributes to the discourse about life in internment camps. Models of dominance and resistance have long shaped the field of historical archaeology (e.g. McGuire and Paynter 1991) and especially studies of sites of incarceration (Casella 2007). However, MA students analyzing activities at Amache, for example the brewing of saké (Driver 2015) and the modification of materials (Swader 2015), have built compelling arguments that this particularly Western model may

not be the most appropriate for understanding life at Amache. Rather, they argue researchers are better served by other theoretical tools such as practical politics and survivance (Silliman 2001 and 2014).

Transforming the stark military landscape of the camp was a critical internee strategy for humanizing their setting. The study of placemaking at Amache anchors the field school in a robust, interdisciplinary body of study (e.g. Low and Zuniga 2003; Bowser and Zedeño 2009; Wilson and Groth 2003). Amache's cultural landscape, especially gardens and other elements that are the result of internee labor, have been identified as particularly valuable for long-term site interpretation and development. Survey and excavations at Amache have revealed a wealth of placemaking activities by internees. For example, garden studies reveal how internees applied their expertise to a new environment, the High Plains of Colorado (Clark 2017). It is also clear that landscape alterations served both individual needs and community solidarity (Kamp-Whittaker and Clark in press).

Landscape archaeology at Amache acts as a consistent research focus and tool for training students in excavation techniques. Amache's landscape features contain significant data revealed through careful excavation, archaeobotany, soil chemistry, and palynology. Although gardens at other internment camps have been excavated to reveal landscaping elements such as walls or ponds, the DU Amache Project is the first to examine these using such rigorous, interdisciplinary garden investigations. As an example of the benefit of this interdisciplinary approach, study of the site's soil chemistry has revealed notable differences between the content and pattern of nutrient concentrations in the gardens compared to non-garden controls (Marin-Spiotta et al. 2015). This suggests that Amache's gardeners were invested in amending the poor, sandy, native soil of the camp. Analysis of the macrobotanical and pollen evidence from the gardens likewise indicates significant internee strategies. In some gardens, higher than expected quantities of remains associated with local wild decorative plants, such as asters, suggests deliberate transplanting (Archer 2011). One surprising result from pollen and phytolith analysis is evidence in two different gardens of *Canna*, a tropical plant common on Hawaiian sites associated with Japanese residents (Jones 2010 and 2015). Such connections from across the Japanese Pacific diaspora help reveal networks internees maintained outside of camp.

A key question in heritage studies surrounds the very nature of heritage itself (Harrison 2010). At Amache, heritage research takes place in dialogue not just with a

descendant community, but with one of living memory. The field school creates unprecedented synergy and it is often the case that finds at the site and museum spur new conversations among community members about life in camp (e.g. Fujita 2014). These collaborations have uncovered a significant corpus of community archival materials that have enriched investigations. For example, many former internees have scrapbooks of photographs that capture details of daily life and the camp landscape. By digitizing these collections, and those at the Amache museum, the field school continues to build an archive for the future. Through these interactions with internees and descendants, field school students learn that heritage is not just objects or places, but it is a process (Smith 2006) in which they are actively engaged. Thus, the setting yields a nuanced understanding of the critical role of communities of concern in scientifically and ethically sound heritage management. This is just the sort of training that future practitioners' need (Atalay 2012; Clark in press). Even field school students who pursue other professional paths find this community-building transformative, leading to a more civically-minded populace (Nassaney and Levine 2009).

Graduate research has been incorporated into each field season, resulting in six completed master's projects on topics including the experiences of women and children (Shew and Kamp-Whittaker 2013), best practices in garden archaeology (Garrison 2015), the role of modified objects (Swader 2015), and traditional activities in camp (Driver 2015, Starke 2015). The field school continues to play a critical role in the professional lives of these students (for example through later publications or continuing research). Allowing graduate students an integral role in planning and implementing the field school provides them with a greater understanding of how to construct a field research project, an element key to their professional development (Clark 2012). Undergraduate students benefit from the chance to work closely with graduate students in the collection and interpretation of data. They get an inside view of the independent research process, important scaffolding for their own development as scholars.

In the coming 2018 field season graduate student research will once again be incorporated into our field plan. April Kamp-Whittaker, a DU alumni and current PhD student at Arizona State University will be collecting additional data for her research on community structure and social interaction at Amache. This research draws on existing foci of placemaking and daily activities to understand how Amache functioned as a social sphere.

Her research posits that internees used the development of social activities and modifications to the physical environment to reconstruct existing and develop new social networks. Using both archaeological and archival data Kamp-Whittaker's research works to expand our understanding of Amache and consider it as an integrated community. During the 2010, 2012, and 2014 field seasons the Amache field school worked closely with the Amache Preservation Society, Friends of Amache, and Colorado Preservation, Inc. to conduct testing of areas of the site planned for preservation and development. The field school worked to ensure that no significant resources would be damaged by construction. This type of work, along with the ongoing museum efforts, are part of the goal to protect the site while educating future generations. There are no anticipated needs for this type of work during the 2018 field school, however if that were to change, we would accommodate those needs to the best of our ability.

Survey Field Methods

The surface field methods employed in 2018 will largely follow the protocol developed in the five previous years of fieldwork. Intensive surface survey allows us to gain an overall understanding of daily life in each block that once housed barracks. Each barrack block contained a mess hall, a bath and laundry facility, twelve domestic barracks, and one barrack used for recreational purposes ranging from the Boy Scouts Headquarters to the Buddhist Church. Survey to date in 19 barracks blocks and 4 public blocks (Figure 1) has enabled crews to intensively investigate residential and internee common areas of the site, revealing patterns in the use of space and trends in types of material objects specific to each block. Something our survey has revealed is the presence of some block-wide landscaping plans for tree planting, whereas the pattern in other blocks seems to be largely the result of more haphazard individual plantings. In 2014, we found more evidence of this pattern, as well as significant landscaping efforts in public areas such as the block that housed the Amache Co-op and police station (Block 9F). Incorporating oral histories, archival research, surface survey, and ground-penetrating radar analysis, crews were able to identify the location of a sumo ring in Block 9F as well (Starke 2015).

Barrack Blocks and Years Surveyed

Granada Relocation Center / Amache

Date: 10/18/2016



Figure 1: Portions of the camp devoted to internees surveyed during previous DU Amache Field Schools

As Figure 1 attests, despite our significant progress, a good deal of the portion of the camp devoted to housing and services for internees remains unsurveyed. In 2018 we plan to survey two additional barracks blocks, potentially 9E and 8G, to complete the sample needed for Kamp-Whittaker's research and continue ongoing efforts to survey the entire site. These blocks were selected based on the function of their recreation hall, the composition of residents' community of origin and how often they are represented in previously collected social network data. The two blocks selected have only moderate integrity so prior to the start of the 2018 season Kamp-Whittaker and Clark will conduct a short reconnaissance to finalize the blocks to be surveyed and ensure that the data they provide will be sufficient to meet research needs. Several alternative blocks have already been selected from the areas yet to be surveyed.

We also plan to conduct exploratory survey of a sample of the residential administrative area. To date no sections of the administrative area have been surveyed by field school crews. The administrative residential areas in particular will provide a comparative sample with the internee barracks blocks. This area may also yield data about interactions between internees and the camp administration. Survey of these areas of Amache during the 2018 season will be used to determine the integrity of the administrative section and its potential for more complete survey in following seasons.

During survey, digital tallies of non-architectural artifacts will be recorded for each block in order to provide information on overall artifact distribution between blocks. We will flag personal objects, ceramics, modified items, items that are temporally diagnostic, and any additional items of interest for student research projects. Flagged items will be further analyzed and digitally mapped. Items that are rare, that will yield more data with additional analysis, and objects appropriate for public interpretation of the site will be collected temporarily for in-field laboratory analysis. A selection of those items, especially those that will yield more data with longer-term research or are appropriate for public education will be collected for eventual curation at the Amache museum.

Features will also be identified during survey, including informal trash dumps, modifications to architecture, and landscaping. Identified features will be surveyed and recorded separately from the block in which they were found. In informal trash dumps, transects will be reduced to 1m spacing and artifact tallies will be recorded separately. Objects found within informal trash dump features will be treated in the same manner as

non-feature objects. The perimeters of both informal trash dumps and landscaping or outdoor activity areas will be flagged to facilitate mapping.

Locations of flagged artifacts and features will be mapped using a Global Positioning Satellite (GPS) unit accurate to 10 cm and corrected using data from a base station in Lamar. During post-field analysis, survey data will be added to the GIS database for the site. This locational data will allow analysis of artifact distribution and density within each block and across the site. The final process of this research will be the detailed analysis of collected artifacts within a laboratory setting.

Site Testing: Landscaping at Amache

Since the inception of the project in 2008, we have employed a range of techniques to investigate the landscaping features at the camp, with special attention to gardens. Over time these have evolved into a robust integration of multiple landscape archaeology techniques, including ground penetrating radar, single-context stratigraphic excavation, soil chemistry analysis, archaeobotany, and palynology.

Research questions that have driven the work include:

- 1) Were internees amending the poor soil of the camp and if so, how?
- 2) What types of strategies for transforming the military environment are evident both in the hardscaping and plant remains of the gardens?
- 3) How do the gardens fit into the larger picture of life in confinement?
- 4) Are there intact gardens located in areas of the site slated for development?
- 5) What other types of modifications are internees making to the camp landscape?

To better capture the relatively shallowly buried, and often ephemeral landscaping features of the camp, we employ fine-grained ground penetrating radar analysis. Woody vegetation (such as sagebrush) are cleared to allow for better coupling between the antenna and the ground surface. We also run transects at a very close, 25 cm spacing. Our results have been promising. For example, in 2010 we investigated a vegetable garden within the area of potential effect for site development work. Despite only having been demarcated originally by a light fence, the boundaries of the garden, especially the corners, were quite visible in the GPR reflections. Test excavations in this garden revealed remnants of the light wood and wire fence that appears to have been the source of the GPR anomaly. Using the

GPR data in combination with historic photographs, we were able to protect the garden through an avoidance zone for construction. These results bode well not just for the future of research at Amache, but also for the application of GPR for landscape archaeology of ephemeral features (Conyers 2012). That promise was borne out in 2014, when through GPR we were able to identify more ephemeral landscaping, including informal pathways and a baseball field.

As in past years, in 2018 a combination of historic documents (when available), and surface survey will be used to identify potential landscaping features. Once those features are identified, they will be subjected to investigation using ground penetrating radar (GPR). The GPR data helps us assess the size, shape and integrity of landscaping features. This is especially important in the many areas of the site where the historic surface is overlain by soil that has been deposited since site abandonment. In some instances, surface evidence and GPR will provide enough information to assess a features' integrity. In other instances, features will need to be subjected to test excavations before their significance and integrity can be established.

These features will be carefully excavated following protocol established in prior field schools, protocol which is informed by standards common in landscape archaeology. Grids tied into the geometry of the site plan (using cardinal directions) will established over the area of the features to be excavated. In order to assess patterns in both hardscaping and plantings, we tend to employ large excavation units, typically measuring 2m x 2m. When multiple units are employed within a single feature, they will be planned to preserve areas of feature fill. Excavation in the units will begin with arbitrary levels. When stratigraphy is encountered within a unit, the remaining excavation will employ stratigraphic levels dug by context. All soil not collected for analysis will be sieved through 1/8" mesh and all artifacts will be collected, with the exception of coal and coal clinker which will be documented in the field and added to the backfill.

Post-Field Analysis

Following the field school, the MA student who will serve as the Lab Director will organize artifacts collected during intensive survey and excavations, assigning lot numbers to aid in analysis and entering provenience data into the established site database. The artifacts themselves will be analyzed by students in Dr. Clark's course, Historical Archaeology, which

will be held in the Fall of 2018. Under her supervision, students will complete both basic functional analysis, as well as more intensive analysis based on material type (e.g. for ceramics they will determine ware, vessel form, and decorative techniques). The field and lab data will be synthesized into a technical report, which will also serve as a resource for other presentations of the data, both public and academic.

References Cited

Archaeological Institute of America

2011 The Archaeology of World War II. *Archaeology* 63(4).

Archer, Steven N.

2011 *Amache Garden Testing - Archaeobotanical Analysis*. Manuscript on file at the University of Denver, Department of Anthropology.

Atalay, Sonya

2012 *Community-Based Archaeology: Research with, by, and for Indigenous and Local Communities*. University of California Press, Berkeley.

Branton, Nicole Louise

2004 *Drawing the Line: Places of Power in the Japanese-American Internment Eventscape*. Unpublished Dissertation, Department of Anthropology, University of Arizona.

Burton, Jefferey F.

1996 *Three Farewells to Manzanar: The Archaeology of Manzanar National Historic Site, California*. Western Archaeological and Conservation Center Publications in Anthropology 67. National Park Service, Tucson.

Burton, Jefferey F. and Mary M. Farrell

2001 *This is Minidoka. An Archaeological Survey of Minidoka Internment National Monument, Idaho*. Western Archaeological and Conservation Center Publications in Anthropology 80. National Park Service, Tucson.

Burton, Jefferey F., Mary M. Farrell, Florence B. Lord and Richard W. Lord

2002 *Confinement and Ethnicity: An Overview of World War II Japanese American Relocation Sites*. University of Washington Press, Seattle.

Bowser, Brenda J. and María Nieves Zedeño

2009 *The Archaeology of Meaningful Places*. University of Utah Press, Salt Lake City.

Casella, Eleanor Conlin

2007 *The Archaeology of Institutional Confinement. The American Experience in Archaeological Perspective*. The University Press of Florida, Gainesville.

Clark, Bonnie J.

2012 From Graduate to Professor: Changing Perspectives on Field Schools. In *Global Perspectives on Archaeological Field Schools: Constructions of Knowledge and Experience*, edited by Harold Mytum, pp. 217-228. Springer, New York.

2017 Cultivating Community: The Archaeology of Japanese American Confinement at Amache. To be published in *Landscape, Memory and the Politics of Place: Archaeologists, Stakeholders, and the Intangible Heritage of Landscape*, edited by Fernando Armstrong-Fumero and Julio Hoil Gutierrez. University Press of Colorado, Boulder.

In Press Making Heritage Happen: The University of Denver Amache Field School. To be published in *Archaeologists and the Pedagogy of Heritage*, edited by Phyllis Mauch Messenger and Susan J. Bender. University Press of Florida, Gainesville.

Colwell-Chanthaphonh, Chip. and T.J. Ferguson (editors)

2008 *Collaboration in Archaeological Practice: Engaging Descendant Communities*. Lanham, MD: AltaMira.

Conyers, Lawrence

2012 *Interpreting Ground-penetrating Radar for Archaeology*. Left Coast Press, Walnut Creek, California.

Driver, Christian

2015 Brewing Behind Barbed Wire: An Archaeology of Sake at Amache. Unpublished Master's Thesis, Department of Anthropology, University of Denver.

Fujita, Dennis

2014 Returning to Amache. Manuscript on file at the Department of Anthropology, University of Denver.

Garrison, David

2015 A History of Transplants: A Study of Entryway Gardens at Amache. Unpublished Master's Thesis, Department of Anthropology, University of Denver.

Harrison, Rodney

2010 What is Heritage? In *Understanding the Politics of Heritage*, edited by Rodney Harrison, pp. 5-42. Manchester University Press, Manchester.

Jones, John

2010 Analysis of Pollen from Amache Internment Camp, Colorado. Washington State University, Pullman, WA. Manuscript on file with the University of Denver, Anthropology Department, Denver.

2015 Analysis of Pollen and Phytoliths from Amache: A Japanese Internment Camp in Colorado. Manuscript on file with the University of Denver, Anthropology Department, Denver.

Kamp-Whittaker, April

- 2010 Through the Eyes of a Child: The Archaeology of WWII Japanese American Internment at Amache. Unpublished Master's Thesis, Department of Anthropology, University of Denver.
- Kamp-Whittaker, April and Bonnie J. Clark
 In Press Creating Community in Confinement: The Development of Neighborhoods in Amache, a WWII Japanese American Internment Camp. To be published in *The Archeology of Removal*, edited by Terrance Weik. Under review by the University Press of Florida.
- Lightfoot, Kent G., Antionette Martinez, and Ann M. Schiff
 1998 Daily Practice and Material Culture in Pluralistic Social Settings: An Archaeological Study of Culture Change and Persistence from Fort Ross, California. *American Antiquity* 63(2):199-222.
- Lightfoot, Kent G.
 2008 Collaborative Research Programs: Implications for the Practice of North American Archaeology. In *Collaborating at the Trowel's Edge: Teaching and Learning in Indigenous Archaeology*, edited by Stephen Silliman, pp. 211-227. University of Arizona Press, Tucson.
- Little, Barbara J. and Paul A. Shackel (editors)
 2007 *Archaeology as a Tool of Civic Engagement*. Lanham, MD: AltaMira Press.
- Low, Setha M. and Sally Engle Merry
 2010 Engaged Anthropology: Diversity and Dilemmas: An Introduction to Supplement 2. *Current Anthropology*, 51(S2)S203-S226
- Low, Setha M. and Denise Lawrence-Zúñiga
 2003 *The Anthropology of Space and Place: Locating Culture*. Wiley-Blackwell. New York.
- Marin-Spinotta, Erika, Emily Eggleston, and Laura Szymanski
 2015 *Camp Amache Soil Chemistry Report*. University of Wisconsin, Madison, WI. Manuscript on file with the University of Denver, Anthropology Department, Denver.
- McGuire, Randall H. and Robert Paynter (Editors)
 1991 *The Archaeology of Inequality*. Basil Blackwell, Oxford, U.K.
- Morine, Chris and Bonnie J. Clark
 2014 Lessons in Humanity: The Archaeology of Landscape at Amache and Camp Trinidad. *Telluride Tales, A Journal of the Telluride Historical Museum* 3:11-16
- Mytum, Harold and Gilly Carr (Editors)
 2012 *Prisoners of War: Archaeology, Memory, and Heritage of 19th Century Mass Internment*, Springer.

- Nassaney, Michael S. and Mary Ann Levine (Editors)
 2009 *Archaeology and Community Service Learning*. University Press of Florida, Gainesville.
- Shew, Dana Ogo and April Kamp-Whittaker
 2012 Perseverance and Prejudice: Maintaining Community in Amache: Colorado's Japanese Internment Camp. In *Prisoners of War: Archaeology, Memory, and Heritage of 19th Century Mass Internment*, edited by Harold Mytum and Gilly Carr, pp.303-317. Springer, NY.
- Silliman, Stephen W.
 2001 *Agency, Practical Politics, and the Archaeology of Cultural Contact*. Journal of Social Archaeology.
- 2008 *Collaborating at the Trowel's Edge: Teaching and Learning in Indigenous Archaeology*. University of Arizona Press, Tucson.
- 2014 Archaeologies of Indigenous Survivance and Residence: Navigating Colonial and Scholarly Dualities, pp. 57-75. In *Rethinking Colonial Pasts through Archaeology*, edited by Neal Ferris, Rodney Harrison, and Michael V. Wilcox. Oxford University Press, London.
- Skiles, Stephanie A. and Bonnie J. Clark
 2010 When the Foreign is not Exotic: Ceramics at Colorado's WWII Japanese Internment Camp. In *Trade and Exchange: Archaeological Studies from History and Prehistory*, edited by C. Dillian and C. White. Springer Press, New York.
- Smith, Laurajane
 2006 *Uses of Heritage*. Routledge, London.
- Starke, Zachary
 2015 Traditional Japanese Practices at Amache. Unpublished Master's Thesis, Department of Anthropology, University of Denver.
- Swader, Paul
 2015 An Analysis of Modified Material Culture from Amache: Investigating the Landscape of Japanese American Internment. Unpublished Master's Thesis, Department of Anthropology, University of Denver.
- Tamir, Orit, Scott C. Russell, Karolyn Jackman Jensen and Shereen Lerner
 1993 *Return to Butte Camp: A Japanese-American World War II Relocation Center*. Prepared for: Bureau of Reclamation, Arizona Projects Office.
- Wilson, Chris and Paul Groth
 2003 *Everyday America: Cultural Landscape Studies after J. B. Jackson*. University of California Press, Berkeley.