### DU Amache 2016, Field School Summary

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From June 14 to July 15, 2016, crews of undergraduate and graduate students, high school interns, volunteers, and staff worked to further understand the material record of Amache, Colorado's WWII-era Japanese American confinement camp. The project benefitted from the wide range of talents and expertise of the 21 participants in this year's field school, especially the three former Amache internees and two descendant crew members. The mornings were spent at the site itself, where crews conducted first intensive pedestrian survey, followed by ground-penetrating radar, and test excavations. We conducted survey in three different blocks: 9F, an undeveloped block in which many informal trash dumps were located, 10F, the camp's playing fields, 11F, a barracks block. In addition crews tested a garden in barracks block 11H, a previously surveyed barracks block. In the afternoon crews worked on managing the collections of the Amache museum, including creating an off-site storage facility at the new Amache Research Center.

During the field school we were visited by a number of people of Amache stakeholders. Some visitors were relatives of our crew, including Asa Yonemura, a former internee whose granddaughter Halle Sousa served as one of our high school interns. Halle's video featuring interviews with her grandfather and archaeology at Amache can be accessed at <a href="https://vimeo.com/182756704">https://vimeo.com/182756704</a>. Toward the end of the field school we held two very successful open house days. The first was geared to people with personal or family ties to Amache. The nearly 30 attendees were given a chance to see ongoing archaeological research and then were led on tours of their family spaces in camp as well as the newly reconstructed barrack (Figure 1). After activities at the museum (discussed below), we held a group dinner at the new Amache Research Center. The next day was the public open house day, with a similar chance for visitors to see both the site and the museum. Some of our community open house attendees stayed that day, and they were joined by about 80 members of the general public.



Figure 1: Assistant Field Director April Kamp-Whittaker shares her research on children's lives at Amache with community open house visitors touring the location of the elementary school.

#### Museum Work

During the 2016 Amache field school season, students, interns, and volunteers were able to participate in a variety of projects in the Amache Museum. A main priority unique to this season included moving the museum collections to a new collections space at the Amache Research Center (ARC). In the process, students created archival boxes and travel mounts for about sixty objects (Figures 2 and 3). Students learned why custom travel mounts were essential for keeping objects safe during the move. They also learned the importance of keeping a detailed inventory at all times. Two shelving units were also added to the collections room to accommodate the large amount of objects. Increasing shelving space helped avoid stacking multiple boxes on top of one another and helped keep a fairly exact inventory. Object photography, led by 2016 DU graduate Mason Seymore, was also completed in the new space. Both museum and archaeological collections were photographed, and students were able to learn proper object photography techniques. A student also created an object handling display for the museum room.

The new collections space at the ARC is beneficial in multiple ways. For example, it has better environmental control than the Amache Museum. Temperature, relative humidity, and integrated pest management (IPM) control measures can help better preserve museum collections for the future. We also installed black out curtains over the windows to prevent light damage to the objects. The new collections room also allows for more space and access for community members or researchers. The Amache Museum storage space now has more room for museum supplies and traveling cases. There is also a dedicated shelf at the Amache Museum for new collections that have not been processed, along with the Deed of Gift and Object Record Form. All shelves were labeled to improve inventory management as well. Ideally this will help APS easily track new collections in between field schools.

In general, museum collections that were not on display as well as cultural items were taken to the Amache Research Center. Empty boxes whose objects were on display and archives were kept at the Amache Museum. Because of this separation, it was essential for each facility to have an Amache Museum and an Amache Research Center inventory to keep track of collections. Museum crew chief Rebecca Cruz also created "Object In/Out" slips so that objects that were currently being used for presentations or for research purposes could be tracked. In the ARC, she also hung an inventory on the shelving units. One inventory was listed by location and the other was listed by object number.

About thirty new objects and archives were accessioned into the Amache Museum collection this summer. Among the new collections included dance bids and invitations, a basketball trophy, an Amache t-shirt with the Amache Indians logo, and an Amache fire badge pin. In the accessioning process, students were able to learn a variety of collections management tasks. These include condition reporting, cataloguing, photographing, labeling, and rehousing each accession. Students were also able to learn about provenience in a museum setting. All data was then entered into the museum database system. In addition to the standard accessioning process, photos were attached to museum collection boxes so that it would be easier to identify objects without opening each box.



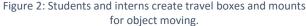




Figure 3: Intern Tarin Kemp's mount and travel box.

An important stakeholder in this project who were able to learn these skills are the Granada High School interns. With museum collections management experience, these students can continue working in the museum when the field school is not in session, and can also teach other high school students their skills. This is essential since the museum is primarily run by high school students and their principal and president of the Amache Preservation Society, John Hopper. Consistent collections management practice can help better preserve museum collections for the future.

Community curation was a critical part of the field school in collections management. A great example of this was rehousing the dance bids and invitations, donated on behalf of a former internee by Minoru Tonai, president of the Amache Historical Society. These dance cards came to the museum in a wooden frame and each card was attached to the backing with a metal pin. Tom Tokunaga, a former Amache internee, was the original owner of the collection, and this case was displayed at multiple Amache reunions. In order to both preserve this collection and keep the original owner's intention, an archival acid-free backing board replaced the original board and the pins were removed. The arrangement of dance bids and invitations stayed the same.

In addition to collection management tasks, students were able to create three new exhibits for the Amache Museum. Two became part of an overall exhibit about high school students at Amache. One includes a display about a basketball competition in camp, and the other exhibit includes a display about relocation booklets. The latter are essentially book reports written about the Amache high school students' new home after internment. For example, there are book reports on Chicago, Denver, Michigan, and New York. Both these exhibits include objects new to the Amache Museum collection.

Students also created an exhibit entitled, "Dancing behind Barbed Wire," which was about the Tokunaga dance bids and invitations. It tells the story about how teenagers in camp were able to make their lives more enjoyable through events like dances. In the exhibit development process, students learned about how to write exhibit text, consider panel design, as well as how to arrange an exhibit space, all as part of a team.

General exhibit maintenance was implemented as well. For example, objects that had been on display for a considerable amount of time were rotated off display. Objects that seemed out of place were incorporated into other exhibits to make the displays flow better. A short exhibit text about the *geta* (traditional Japanese wooden shoe) on display and a new card by famed graphic designer Alberto Vargas were incorporated as well to provide context. In addition, a mirror was placed behind the Vargas card in the military display case, so that visitors could easily see both sides of the card.

Having the museum open during the field school allowed for an abundance of museum visitor attendance. Excluding the open houses, the museum saw ninety-eight visitors during the month long period. The open houses together attracted about sixty five visitors to the museum. In total, the museum saw one hundred and sixty three visitors. Men, women, and children of all ages toured the exhibits and spoke about their perspective on Japanese American internment. For most, this was their first visit to the museum.

Both open houses were very successful at the Amache Museum. Students led tours for the visitors and each student discussed their own exhibit project. The dance bid rehousing project was still in progress, so visitors were able to see work being done in the museum and ask questions. One student enhanced an interactive—the Amache Poetry Society—at the open houses. She set up a haiku tree with paper cards for visitors to write their own haiku. Many of the visitors at both open houses were inspired to write haiku. The student also created a brochure for visitors to take home with them, which included some background information on the importance of poetry in camp. At the community open house, former internees and their families were able to see the new displays and collections and browse through photo albums and Amache yearbooks. The Amache museum and the Field/Museum lab at the ARC provided spaces for community members to tell stories about life at Amache. The public open house also brought many visitors to the museum to look at the exhibits and speak with the Amache field crew about their work.

### **Ground-Penetrating Rader and Test Excavation of Amache's Landscape**

As part of ongoing research on the gardens and landscapes of Amache, we pursued investigations in two areas of the camp. We began with ground-penetrating radar (GPR) study of an area in Block 8F. 8F was the site of research in 2014 during which time we discovered evidence of "median" gardens. Unlike most blocks where gardens in the front of the barracks are located primarily adjacent to doorways, in 8F there appears to be gardens located centrally between barracks. We chose an area located between barracks 9 and 10 in which there was a tree and river gravel in the center between the barracks, good evidence of a median garden. However, the ground-penetrating radar was inconclusive and suggested some significant ground disturbance. Therefore, we chose not to do excavations in this area.

We chose a new area to investigate with GPR, an area of Block 11H, which was surveyed in 2012. In that year we encountered an interesting garden located along the back, rather than the front of a barrack. Designated Feature 1 of 11H, this garden faces the road on the south edge of this block. So despite

being in the "backyard" of Barrack 1, it would have been a very public garden. Visible evidence of the garden included three standing dead trees evenly spaced at 6 m apart on the east end of the garden. The west end of the garden has two upright concrete elements. Ground-penetrating radar was conducted in the west end of the garden to avoid the interference from tree roots. Results, like in 8F, were not strongly conclusive, but did indicate several possible garden-related features. Thus the GPR and the surface elements together led us to choose this location for test excavation.

An excavation grid was established using the 11H GPR grid as a baseline and designated 700mN/700mE. We laid out a checkerboard pattern of 2 m by 2 m test units, a methodology often employed in garden settings (Figure 3). We began with two excavation units. Unit 705N/702E was chosen because it was centered over what the GPR indicated might be a gardening-related feature. Unit 705N/706E was chosen because it was adjacent to a standing concrete gardening element. An additional unit, 707N/704E was opened several days later.

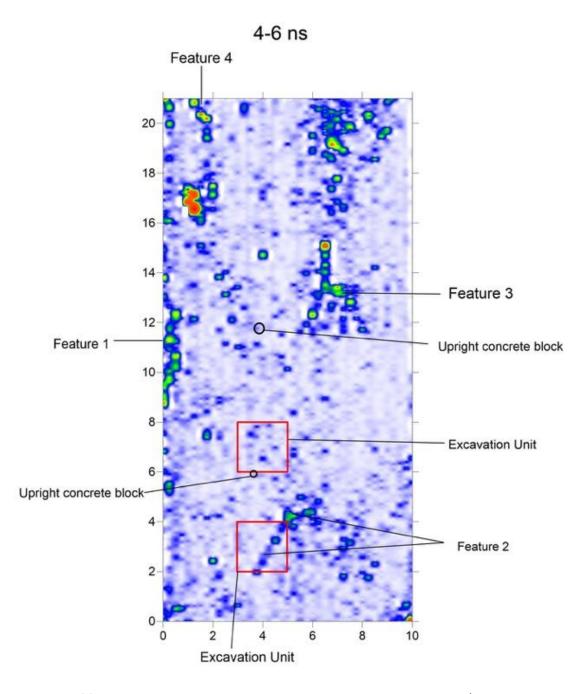


Figure 3: Location of first two excavation units within the GPR grid in 11H. Unit 705N/702E is the lower unit, the upper unit is 705N/706E. Grid is oriented with east at the top.

# 705N/702E

Excavation of this unit revealed that the possible GPR feature that ran angled through the unit was likely an active rodent burrow. That burrow was located in the Aeolian sediment that has been deposited above the garden surface. Once the garden surface was reached, excavators uncovered a series of features related to a tree that once was growing in the garden. By referencing the extant trees, it

became clear that this tree followed the design logic of the standing trees in the garden. Not only is it in linear alignment, it is spaced at 18 m from the final tree. Thus discovery of the tree suggests that two other trees were likely planted in the garden at 6 m intervals between the standing tree and the one revealed through excavation.

The tree features were found in the northern portion of the unit and extend into the unexcavated unit directly to the north. Following our methodology of single-context excavation, we dug the remains of the tree (what is known as a tree or root mold) separately from the fill located in the tree planting hole. Each of these contexts were thoroughly sampled in the hopes of discovering the species of tree, as well as evidence of other possible garden plantings.

### 705N/706E

No garden related features were uncovered within the fill of the unit during excavation. However, the west wall profile did reveal the builder's trench for the standing concrete garden element adjacent to the unit. Soil samples taken from the profile and during unit excavation will help us better understand the soil chemistry and plant remains in this garden.

### 707N/704E

The discovery of the tree in unit 705N/702E led us to hypothesize that there could have been more plantings in the west part of the garden. We were particularly interested in what garden evidence might be found between the tree line and the barracks building. Therefore we opened up unit 707N/704E to further investigate that possibility. Excavation in this unit revealed another garden planting, likely either a small tree or a shrub. During excavation it became clear that the roots of the original plant were surrounded by a soil type very different from the resident soil at Amache (a brown silty sand). What we found was a 5 cm rind of greyish silty clay (Figure 5). A field trip to the Arkansas River indicates the soil we encountered is similar to that along the banks of the river.



Figure 5: Feature indicating a potential garden planting of small tree or shrub.

A few sources (both written and oral) suggest that some internees procured trees and shrubs along the Arkansas River, transplanting them at Amache. Our research on-site (both survey and excavation) to this point had not revealed any physical evidence of this practice. However, in this unit we seem to have uncovered robust evidence that the creators of this garden transplanted a tree or shrub with its native soil to this location. Many soil samples were taken during this excavation to help us better understand the chemistry, pollen, and plant remains revealed in the soil rind around the tree and in the tree's larger planting hole.

# Summary

Excavations in Feature 1 of 11H led us to better understand gardening practices at Amache. From surface evidence it appeared that this garden employed two different aesthetics: an American-style tree line on the east, and a more Japanese-style highlighting concrete "standing stones" on the west. What excavations revealed is that these two designs were integrated throughout the garden: with trees and stones interspersed throughout. We also discovered that there were additional plantings between the tree line and the barrack. Our botanical studies will likely reveal the species of the decaying root remains, as well suggest the presence of other, smaller, plants. Finally, we have uncovered our first conclusive evidence of the technique of transplantation. Further study will help us assess the

hypothesis that the plant we uncovered was once growing along the Arkansas River three miles north of where we found it in 2016.

## Surface survey Block 10-F

### **Block Overview**

Block 10F was one of four empty blocks located at the center of Amache. This area acted as a hub of social activity and contained the Co-op (9F), planned location of the Elementary school (9G), High School (10G), and the athletic fields associated with the high school (10F). Historic photographs of 10F indicate that facilities were constructed for football and baseball. These included a fairly substantial goal post and bleacher area for seating. Based on the location of the high school in these photographs the sports fields would have been a combined baseball/football field (Figure 6), similar to the one still used at the Granada High School. The athletic fields were also used for other community activities including festivals like the Obon.



Figure 6: Block 10F sports fields located across from the high school.

## Survey

## Artifacts:

The 2003 survey of 10F mapped an area with a high concentration of artifacts located in the center of the block. Our survey confirmed their finding with only a few artifacts recovered near the edges of the block and a majority located in a single concentration in the center. The artifacts recovered encompass a wide range of materials from tin cans, to personal objects, and some larger materials probably related to the area's use as a sports field and public space. In comparison to the residential blocks surveyed in previous years, the artifact density is much higher with 210 FAs recorded. The size, diversity, and completeness of the artifacts also appear to be different (although this needs statistical confirmation).

There is a higher quantity of complete and large artifacts more consistent with the use of the center of the block as a dump rather than the general deposition created during daily occupation or the sites abandonment. The most logical explanation is that the trash dump at the center of the block developed around the time when Amache was closing and trash services had been discontinued. By then the field was no longer being used for organized sports and the open space would have provided an area for trash disposal near residential blocks but far enough away to remove odors and obscure visibility.

One of the more unusual artifacts recovered in 10F were three wire hangers. This is the first time we have found hangers, although 2 more were subsequently found in 11F (residential block directly south) suggesting a link between the trash deposit in 10F and residents of 11F. The wire frames for two clip on lamp shades were also found near the hangers indicating the deposition of residential debris and supporting the idea the people were using this area to deposit trash as Amache was abandoned (Figure 7).



Figure 7: Wire hanger and clip on lampshade recovered in 10F.

A total of 78 modified objects were recorded in 10F. Of these 19 were coal scoops (9% of total FAs), and 43 modified tin cans (20% of total FAs). This is an unusually high quantity of coal scoops to have recovered in one location. A majority are the common style found throughout Amache with a single sheet of metal with the sides bent upwards and a back composed either of wood or of a smaller piece of metal. One scoop was different and made by cutting out one end and side from a large rectangular can, then carefully folding over the cut edges. The modified tin cans could be divided into two categories - cans modified through the addition of a handle (15 total) or through holes punched in the bottom (15 total) (Figure 8). Most of the modified tin cans were of a medium to large size and were found scattered throughout the block. Other modified objects included one possible whisk or rug beater, a large wire cylinder, a folded sheet of fencing, and a large 50 gallon drum with a spout welded on.



Figure 8: Main styles of modified can from block 10F.

Glass jugs were also found in a relatively high quantity with 27 necks recorded, some with associated base (12 % of total FAs). Five could be confirmed as sake jugs, either based on the presence of aqua glass or embossed writing on the base. The prevalence of glass jugs in combination with the modified tin can buckets and the large drum with a waterspout suggest that this block could have been used for sake production. The idea is supported by oral histories that recall the production of sake at Amache and the fact that this block contained large open areas need for such an operation; however, no concrete evidence exists at this time.

The trash deposit also contained a higher quantity of wood then normally observed. Much of it was standard width boards that may have been the remains of barracks, informal structures constructed by internees, or sports/public event related facilities like bleachers. We know the block hosted periodic festivals, fairs, and cultural events such as the Obon. Although a majority of the lumber was unmodified we did recover a handmade *geta*. This piece was simply carved out of a piece of scrap lumber or maybe cottonwood.

### Features:

Today only two archaeological features remain to indicate the blocks role as an athletic field. These are feature 2 and feature 3.

Feature 2 is a long raised berm that runs north/south along the entire length of the block about 6 meters from the edge of the road. The berm stands about 5 meter high in most areas and is associated with large amounts of small pieces of limestone. A similar feature was found in blocks 8F, 9F, and 11F. These blocks are all situated along G Street Amache's main road. Based on the available evidence we believe that this feature acted as a raised walkway or sidewalk and was constructed by internees to facilitate pedestrian movement in Amache.

Feature 3 is probably the remains of the backstop from the baseball field. This feature consists of a long L shaped berm about 8 meters from the road that is topped with a small about of fencing standing about 1.5 to 2 feet high (Figure 9). The fencing is mostly contiguous but is not visible in some areas. The height of this berm also changes dramatically with the E/W running segment being significantly taller and more

prominent then the N/S running section. Based on historic images of the block this may have also been a support for seating. An article from the camp newspaper, *The Granada Pioneer*, not only reaffirms that there was such a fence, it notes why it was built (Figure 10).



Figure 9: Feature 3, wire fencing from baseball field.

BASEBALL CASUALTY	Scrappers 3 3 .500
Hatsuzo Mimura suffered	Skibos 3 3 .500
lacerations of the mouth	Raiders 2 2 .500
which necessitated seven	Wakabas 2 4 .353
stitches to close, and five	KoNuts 0 4 .000
broken teeth, when a base- ball hit him during the re- cent Mercury-Rambler game	*Include games through Aug. 23.
at the 10F field. Every week, there are at least two or three persons get- ting hit by batted balls. We've advised the fans to	keep behind the fence a number of times. The above incident should prove why - it could happen to you.

Figure 10: Granada Pioneer August 25, 1945

Feature 1 is located near the north end of the block between features 2 and 3. It is a lone tree with a scattering of river cobbles surrounding the base. This is probably landscaping along the sidewalk although there is no evidence of other similar features in this block and the tree is close to the sports fields.

Feature 4 was recorded within the larger trash scatter at the center of the block. This section was called out as a feature due primarily to the remnants of a possible architectural feature. The area contained a number of glass jars and jugs along with pieces of milled lumber. The most significant aspect were FAs 68 and 3 cylindrical concrete pieces. The concrete pieces were made by pouring concrete in to large tin

cans (since mostly rusted away). These may have acted as a support or tie down system for something although there was no direct evidence of their have been attached to anything. FA 68 was large metal framework that may have been a sign. This feature is most likely related to the areas use as a sports field although complete identification of FA 68 would help confirm this.

### **Surface Survey Block 11-F**

#### **Block Overview**

11F is a residential block located directly south of 10F and probably the source of some of its trash concentrations. Primarily families relocated from rural communities north of San Francisco inhabited the block. A significant number of families were from the Pelaluma area and a total of 8 apartments were occupied by individuals with the last name Otani (7 from Petaluma 1 from Cotati) suggesting that this may have been a large extended family. While the integrity of the block is excellent in some sections the south half was disturbed during deconstruction of the camp and a number of foundations are missing especially from the south west side. This was mapped in 2003 and appears to be an accurate representation of current conditions. Later ranching activities also disturbed the area surrounding the mess hall.

#### Survey

#### Artifacts:

The general artifact composition of 11F seems to be consistent with other residential blocks with a total of 67 FAs recorded. The artifacts found appear to be a mixture of personal or household goods with materials supplied by the WRA such as dishes and cans from the mess hall. A total of 7 marbles were found mainly along the edges of the block. This location and quantity is consistent with other residential blocks. The quantity of modified cans is surprisingly low with only four recovered, one of which was a tar can, and two larger 5 gallon size cans. Only one mess hall size can with holes punched in the bottom was found. Other than this disparity the artifacts do not indicate any block specific identities or activities although the artifacts discussed in the paragraph below do stand out.

Two artifacts were recorded during the initial survey but never re-found. One was the head of a toothbrush located directly north of the bathhouse in a small trash scatter. The other, found in the same area, was a pale yellow and white glass rod, similar to those used in bead making. This is especially interesting since during the 2014 survey of block 7H a dollhouse sized handmade glass pitcher and a small droplet of melted glass were found indicating that glass making may have been an activity occurring at Amache. Two wire hangers were found near the mess hall. Along with the three hangers found in block 10F, these are the only hangers which have been recorded at Amache indicating that residents of this block may have been disposing of their garbage in 10F. Three pieces of porcelain and a *geta* were all recovered from this block. One piece of porcelain and the *geta* were found in the same entryway garden (discussed below). Although both 11F and 7H were blocks composed of more rural and agrarian communities the types of artifacts recovered were significantly different indicating that occupation alone did not dictate the artifact composition or activities engaged in by residents.



Figure 11: Geta recovered in an entryway garden along with a piece of porcelain.

#### Features:

Post occupation, when Amache was being used to graze cows, a large fence and watering feature was constructed near the mess hall. This included a fence that ran around the entire mess hall, several water tanks, and a pipe system for supplying water (Figure 12). Along with the architectural disturbance, use of feature 1 by ranchers also introduced a large quantity of modern trash and debris dating from the 1960s through 1990s in the area around the mess hall. This is the only major disturbance to the block's overall integrity.



Figure 12: Post occupation disturbance.

The remaining features all appear to have been constructed during the occupation of Amache and consist of 11 gardens and three architectural features.

Of the 11 gardens, 8 are located in from of barrack, 1 in front of the recreation hall, 1 behind barrack facing the road, and 1 between blocks 11F and 11E. The 8 entryway gardens are typical of those found at Amache in most ways. Many of the gardens have evidence of brick entry pads in front of the doorways and trees planted along the front and at the ends of the barracks. A distinctive aspect of this block is the use of uncommon rocks as decoration. Several gardens have basalt or quartz as decorative elements and one appears to have used large blocks of coal. There were also modified trees associated with two of the gardens. One tree had a piece of wire wrapped around it while another had the possible remains of a planting box (Figure 13). Feature 6 is a more unusual garden. It contains a highly diverse mixture of materials including a cobble lined oval cement feature that may have been a koi pond. Also found near this feature was a piece of porcelain, a large chunk of quartz, a piece of basalt, and a handmade wooden geta. Feature 7 was the remains of a garden behind barrack 12 that faced the road. Little of this garden remained except a tree with river cobble, a modified can, and two pieces of abalone. 6. This consisted of a row of trees along the recreation hall, a scatter of river cobbles and a large post possibly from a clothesline. A garden feature was also found between the recreation hall and barrack The last garden was located between blocks 11F and 11E. It consisted of cedar pieces and wire fencing and was most likely a vegetable garden. This assumption is based on the materials used and archival photograph from other blocks which show vegetable gardens located along the edges in a similar position.



Figure 13: Stone lined garden feature and remains of a planting box around a tree.

Of the three architectural features the raised walkway (Feature 15) is the most interesting. A similar feature was found in 10F and this walkway is of a similar height and style. The two walkways almost connect being separated at the junctions of the two blocks by a space about 10 meters wide with a tree in the middle. The other interesting architectural feature was a square cement lined pit located on the east side of the mess hall. This feature was added after the mess halls construction and probably acted as additional storage. A large wooden pallet was located directly east and was likely associated with this feature.

## **Investigations in Block 9G**

**Block Overview** 

Block 9G is located just north of the Amache high school block and across the "main drag" from the coop block. During occupation this was a vacant lot. Original plans for block 9G included construction of an elementary school. Following the public upset over the cost of the construction of the high school the elementary school was moved to a residential block. Previous investigations indicated that the blocks on the northern and eastern boundaries of 9G were occupied by residents relocated from rural and farming communities in central California.

### Survey

Survey in block 9G was completed with the help of a large group of students, interns and volunteers. The survey and test excavation was completed by July 15, 2016 (Figure 14). Block 9G was chosen for its potential for the remains of daily life and food related refuse Block 9G did indeed contain a wealth of data on refuse disposal by both residents and individuals from the post occupation time period. The block was bound on two sides by residential blocks of internees who were previously from rural areas with the block itself remained empty during occupation. Results of survey included 11 features and approximately 470 field artifacts. Field artifacts were recorded in the field while a small number were collected for more in depth recordation with an even smaller number (n=11) were collected for addition to the Amache permanent collection.



Figure 14: Survey of 9G. Left to right; S. Slaughter, M. Seymore, A. Kamp-Whittaker, H. Sousa, L. Rink, A. Hopper, Z. Bidell and C. Armstrong.

The research questions driving the survey in this area revolved around foodways of internees who were preparing supplemental meals outside of the mess halls. With that in mind great attention was paid to refuse revolving around food and its preparation. Artifacts observed during recordation included many types of enamelware pots, pans and pitchers, coffee cans, and modified metal artifacts. One exciting modified object identified during survey appears to be a ginger grater (Figure 15). The other most prevalent artifacts were post occupational refuse like beer and oil cans left behind during the dismantling of Amache.



Figure 15: Modified Metal artifact – Potential grater (FA 271).

# **Excavation**

The goal of excavating in a trash dump was to find remains of foods prepared or grown in the surrounding blocks. An important part of excavation in this area was to find either flora or fauna associated with cooking and gardening in the two blocks. Therefore, intact soils from the occupation period were of interest and samples were collected.

#### **Excavation Unit 1**

The unit was placed in an area that was believed to have buried deposits of food preparation materials within feature six (Figure 16). Within the one meter squared area there an enamel ware metal artifact exposed at the ground surface. The artifact at the time of unit placement was thought to be an enamel ware cooking pot. Also located nearby were surface artifacts like modified tin cans and food related ceramics. The unit was placed in an area that appeared to not have been compromised by wind and water erosion.



Figure 16: Student Cheyenne Armstrong and intern Halle Sousa map excavation unit profiles.

During excavation of this unit, a higher concentration of artifacts was located within the western half of the unit resting on ground surface of the period of occupation. The placement of the artifacts in this area was logical as the hillslope ran southeast to northwest with the artifacts pooling on the western edge of the unit. Excavation revealed that the metal artifact was in fact a pitcher rather than a pot, but it did contain a concentration of soils likely from the occupation period. Soil samples were taken from the topsoil, from within and beneath the pitcher artifact, and the occupation period ground surface. There were only two contexts present in the unit representing the ground surface during occupation and the erosion soils following occupation. Towards the base of excavation artifacts continued to be recovered but these artifacts were found in soils from a network of rodent holes.

#### Conclusion

The DU Amache field school remains a highly successful collaborative project of research, teaching, preservation, and public engagement. New data gathered at Amache, as well as the management of museum collections, provides resources for better understanding, interpreting, and preserving this site of national and even international import. At each step, the project strives to incorporate diverse stakeholders, as well as robust methodologies. We appreciate the hard work of all of our crew and staff, as well as the support of funding agencies. This project was funded in part by a State Historical Fund grant from History Colorado, a public good grant from The Center for Community Engagement and Service Learning, University of Denver, as well as individual donors.