

**KLATAWA- FOLLOWING THE OBSIDIAN TRAIL
MALHEUR NATIONAL FOREST
PASSPORT IN TIME
JULY 25-29, 2011
TEST EXCAVATION AT THE TANTALUS SITE**



Figure 1 Expanding shovel probe 1 (SP-1) into a 1x1 meter test unit (TP-1)

The complex of sites in the Malheur Headwaters was clearly a focus of human activity for much of the last 7,000 years. Several of the Malheur National Forest’s Passport In Time projects have involved testing sites in the Malheur Headwaters. Based on chemical analysis of obsidian artifacts recovered during these projects it appears that people moved into the Headwaters from multiple directions (the southeast, southwest and northeast). Passport In Time projects with the name Klatawa- Following the Obsidian Trail will be focused on testing sites along the proposed travel routes to and from the Malheur Headwaters. Klatawa is a Chinook Jargon word meaning “to go” or “to travel.” Chinook Jargon was a

trade language in common usage in much of the greater Pacific Northwest as late as the 1940's (for more information on Chinook Jargon see <http://www.ydli.org/bcother/chinook.htm>).

This brief overview describes some preliminary results from the test excavation and surface artifact analysis from the first Klatawa- Following the Obsidian Trail Passport In Time project. Fourteen Passport In Time volunteers worked with two Malheur National Forest Heritage Program employees and three Vale BLM Cultural Resource Program employees to collect artifacts from two 5x5 meter surface test units and excavate eight 50x50cm shovel probes and two 1x1 meter test units at site 646-0151. A total of 690 hours were donated to the Malheur National Forest Heritage Program for this project. Site 646-0151 was chosen because it lays along a possible travel route between the Malheur Headwaters and obsidian sources located to the southeast. The original 1981 site record for this site described a hopper mortar which would also tie this site to the Malheur Headwaters where over 200 hopper mortars have been identified. The 1981 site record also described a wide range of artifacts and a spring/meadow complex where there seemed to be a potential for intact buried archaeological deposits. The artifacts recovered during this project will be analyzed in detail during the spring 2012 Lithic Analysis Passport In Time project.

Preliminary results:

Surface survey of the site identified four concentrations of artifacts exposed on the open side slopes above the margins of the meadow/spring complex at the center of the site. Between the artifacts reported in earlier site visits and those identified in this project over 100 formed tools have been described on the site (see Figures 9 and 10 for a small selection).

Of the time diagnostic projectile points, the vast majority have been identified as Elko and Rosegate series points (Figure 11). Elko series points are the last of the atlatl dart points used in the area and date from circa 3500-1250 years ago. Rosegate series points are the first arrow points used in the area and date to 1250-200 years ago. This places the bulk of the use of the site to the last 3500 years. The presence of two Northern Side Notched and one possible Large Stemmed point indicate that less intensive use could date much earlier, perhaps as early as 8,000 or more years ago.

Unusual artifacts encountered include two grinding slabs, one possible mano and a hopper mortar. One of the grinding slabs is quite small with a slightly bowl shaped circular grinding surface. It was found near, and may have been used with, the possible mano which has unusual curved grinding facets (Figure 10). This small grinding artifact appears to have been used to process small amounts of fine material, perhaps herbs, medicinal plants or paint. The hopper mortar base was identified after the project during final GPS documentation and confirms the 1981 documentation and the possible tie to the Malheur Headwaters hopper mortars.

A significant number of basalt cores and early stage reduction flakes were located although there are no natural deposits of tool grade basalt on the site. In discussions with Warm Springs GeoVisions contract archaeological surveyors, who are working in the area and visited the project, there are tool grade deposits of basalt located within ½ mile of the site. These are most likely the source of the basalt and explain the large amount of basalt lithic reduction taking place at the site.

Two 5x5 meter surface analysis units were set up to collect a sample of flakes and tools for lab analysis (Figure 8). Although there was a wide difference in the amount of material recovered in the two surface units, 460 flakes at surface test unit 1 versus 26 at surface test unit 2, in both cases more basalt and ccs flakes (combined) were recovered than obsidian (Figure 14). This is very different from most sites on the Forest where obsidian makes up well over 90% of the debitage.

Even though basalt and ccs flakes outnumber obsidian, obsidian artifacts compose over 80% of the formed tools identified (compare Figures 13 and 14). This suggests that basalt may have been roughed out at this site and then carried to other locations for further refinement. It is also possible that flakes and crude chopping tools (spent cores) may have been the intended final products and this accounts for the scarcity of basalt biface tools. Use wear patterns on basalt flakes are more difficult to identify than those on obsidian flakes and it is possible that we missed utilized basalt flakes during our field analysis. We will be looking closely for signs of use wear on basalt flakes during the spring Lithic Analysis PIT project.

Shovel Probe 1 (SP-1) produced only a limited amount of debitage but a Northern Side Notched projectile point was recovered in level 4 (artifact SP1-1 in Figure 9). After reaching 90cm without encountering bedrock, and with pockets of possible volcanic ash, the unit was expanded into a 1x1 meter test unit (TP-1). TP-1 was excavated to 130cm with two fragments of a CCS biface recovered in level 7 (artifact SP1-2a and b in Figure 9). Levels 12 and 13 produced no cultural material so the unit was terminated but a small shovel probe was sunk in the center in an effort to determine the depth to bedrock (Figure 3). This probe was extended to 195cm and produced no cultural material and did not reach bedrock. This is one of the deepest deposits of soil and sediment encountered on the Forest during site testing. The wall profile indicates there may be a relatively Mazama ash component between 85 and 105cm (Figure 2). Although no cultural material was discovered beneath the Mazama ash in this unit the presence of intact sediments below Mazama suggest an intact pre-7800 year old deposit could be located if the site was used at this early date.

Shovel Probe 3 (SP-3) produced a cluster of rock in level 3 that appeared unlikely to have been deposited through natural processes. This unit was expanded into 1x1 meter test unit 3 (TP-3, see Figure 4). In level 3 the rock deposit was again encountered and appears to be a cultural rock feature (Figure 5). Although no charcoal was encountered several of the rocks in the feature appear to have been heat altered (Figure 6). The rock from the feature was collected and will be cleaned and analyzed during the spring 2012 Lithic Analysis PIT project.



Figure 2 West wall profile of 1x1 meter test unit TP-1.



Figure 3 1x1 meter test unit TP-1 at 130cm. Shovel probe extended in floor of unit to 195cm.



Figure 4 Expanding shovel probe 3 (SP-3) into a 1x1 meter test unit (TP-3)



Figure 5 Rock feature at level 3 of 1x1 meter test unit TP-3



Figure 6 Heat Altered Rock (HAR) fragments from rock feature in TP-3



Figure 7 Water screening shovel probe 7 (SP-7) with Regional oversight



Figure 8 Locating artifacts in 5x5 meter surface test unit ST-1

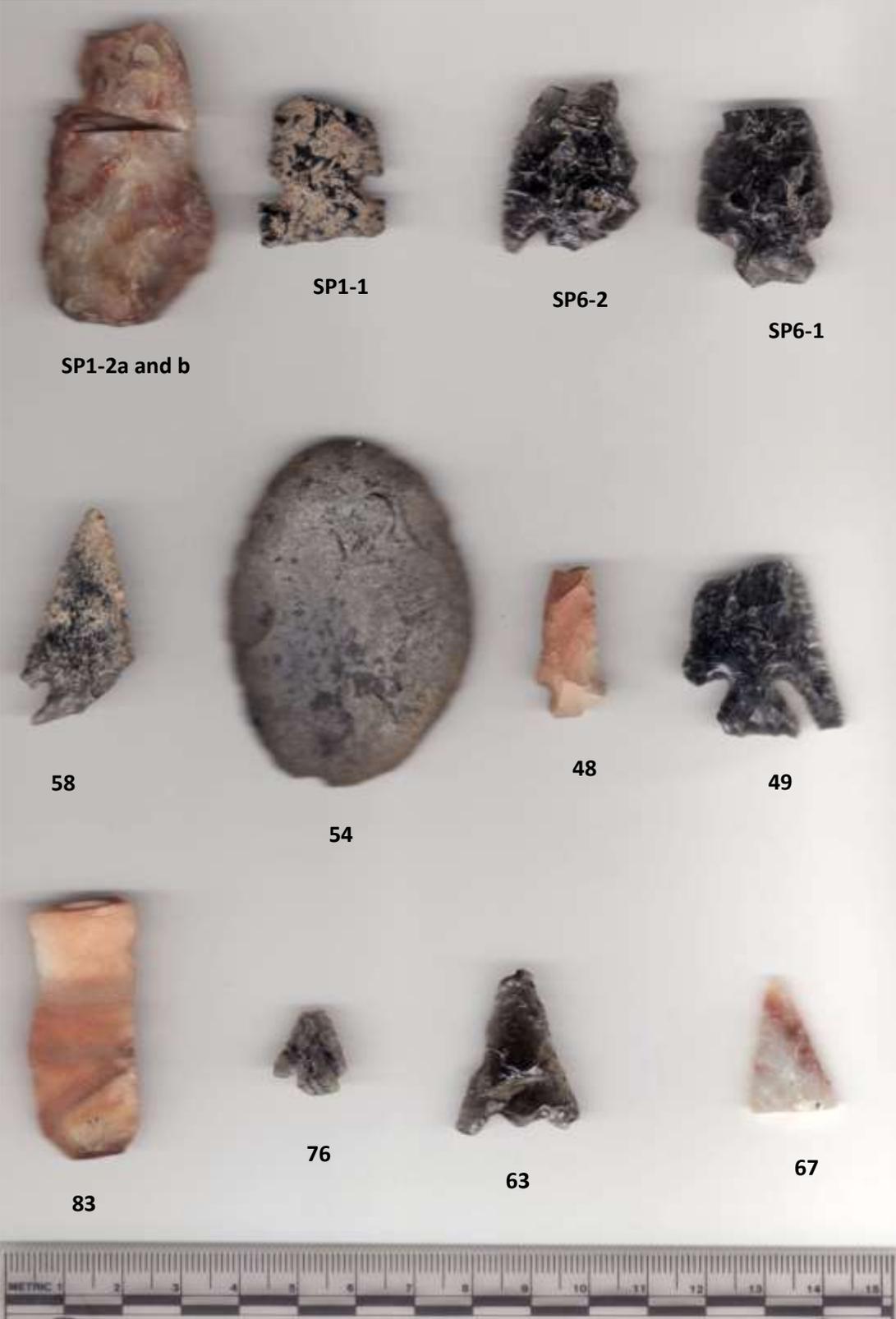


Figure 9 Selected artifacts from site 646-0151 including Rosegate (48, 63, 76), Elko (SP6-1, SP6-2, 49, 58) and Northern Side Notched (SP1-1) projectile points



Figure 10 Artifacts 60, top- a basalt mano with rounded grinding facets (gray, at lower edge) and 72 a small andesite grinding slab with slightly concave grinding surface (gray at center of artifact).

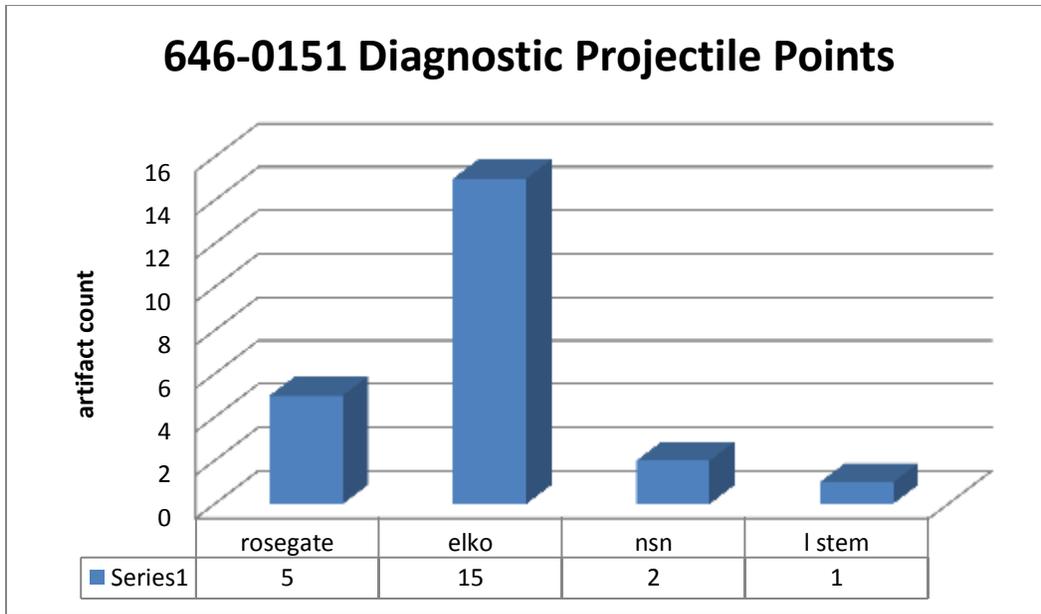


Figure 11 This chart shows the dominance of late period Rosegate and Elko projectile points which demonstrates that the heaviest use of the site dates to the last 3,500 years. The Northern Side Notched (nsn) and Large Stemmed (l stem) points hint at a possible earlier period of use.

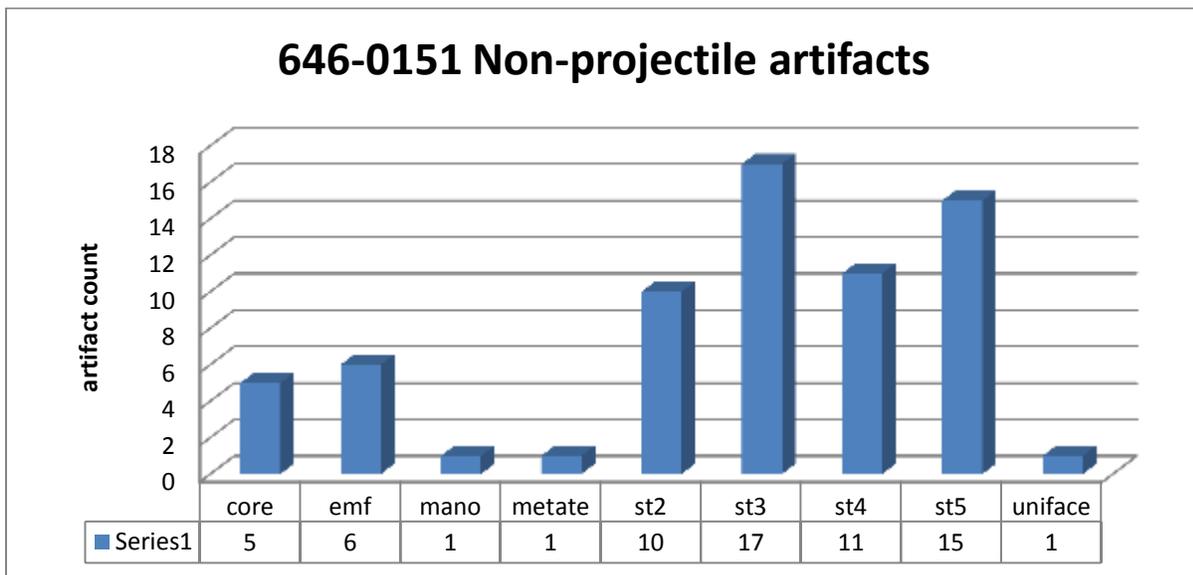


Figure 12 The presence of cores and biface tools in all stages of manufacture (st2-st5) show that stone tool manufacturing was a significant activity at this site

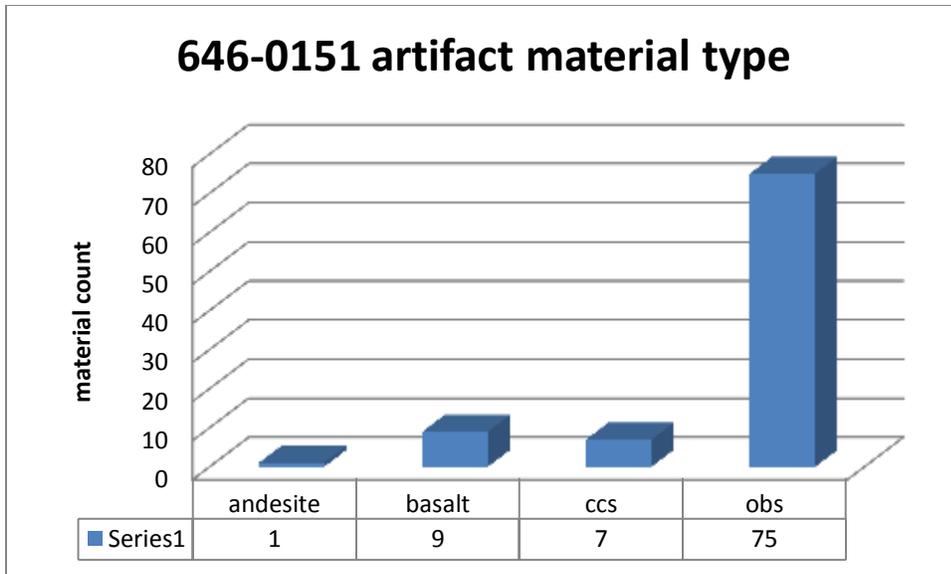


Figure 13 This chart shows that the bulk of the formed tools identified at the site were made from obsidian (obs)

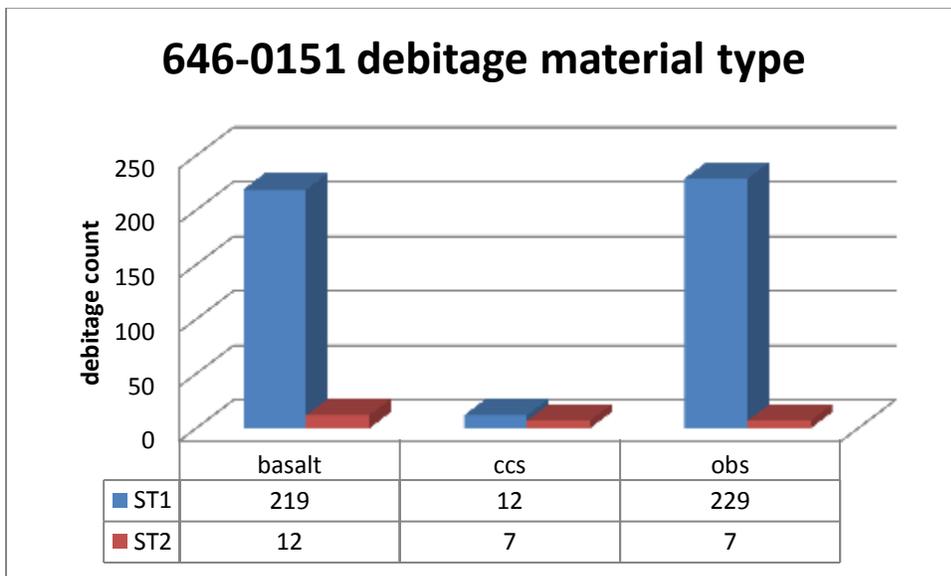


Figure 14 This chart illustrates that nearly equal amounts of obsidian (obs) and basalt debitage (waste flakes from stone tool manufacture) were identified on the site.

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Thank You All! Hope to see you next time! Don