After the flood: Investigations of impacts to archaeological resources from the 2013 flood in southern Alberta

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2016 Southern Alberta flood investigation at sites EePl-261 and EdPm-7 on the Highwood River

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ABSTRACT

In 2016, preliminary excavations were conducted at EdPm-7 and EePl-261 along the Highwood River south of Calgary. The sites were heavily impacted by the 2013 floods and continue to be threatened by future flood events. Excavations, diagnostic artifacts, and radiocarbon dating confirmed that EePl-261 and EdPm-7 are Late Precontact Period sites. Eight interesting *in situ* features were identified and excavated, which contribute to a better understanding of camp life and settlement patterns along the Highwood River. Excavation results from the 2016 southern Alberta flood investigation program along the Highwood River contribute valuable information concerning Alberta's past and provide guidance for future research and site management.

KEYWORDS

Southern Alberta, Late Precontact, Old Women's Phase, Prairie Side-Notched projectile point, Plains Side-Notched projectile point, ochre-sand feature, bone bead

1. Introduction

This article summarizes archaeological investigations undertaken at EePl-261 and EdPm-7 under the auspices of the 2016 southern Alberta flood investigation program along the Highwood River, on either side of the Town of High River (Figure 1). EdPm-7 and EePl-261 were originally recorded in 2014 following the significant floods of 2013 (Porter et al. 2015). EdPm-7 was recorded as a multi-component campsite and EePl-261 as a stratified kill site. The sites were considered to have archaeological significance and worthy of further assessment. To investigate these sites further, Lifeways of Canada Limited was awarded a contract by Alberta Culture and Tourism to complete mitigative investigations.

The goal of the investigation was to retrieve a sample of materials from those site portions under immediate threat of erosion, in order to gain an understanding of the nature of these sites and to propose strategies for site management, including long-term preservation of the sites and site information. Excavations were completed between mid-September and early November, 2016.

2. EdPm-7

EdPm-7 is a multi-component campsite that covers a 200-metre long area paralleling the south side of the Highwood River on the lowest river terrace, 10.5 kilometres southwest of the Town of High River (Figure 2). The surficial geology consists of sediments deposited by streams and rivers that typically include stratified deposits ranging from poor to well-sorted sand, gravel, silt, clay, and organic overbank deposits. Adjacent sediments outside the Highwood River valley are characterized as moraine deposits of till: a mixture of clay, silt, sand and minor pebbles, cobbles, and boulders. These may contain

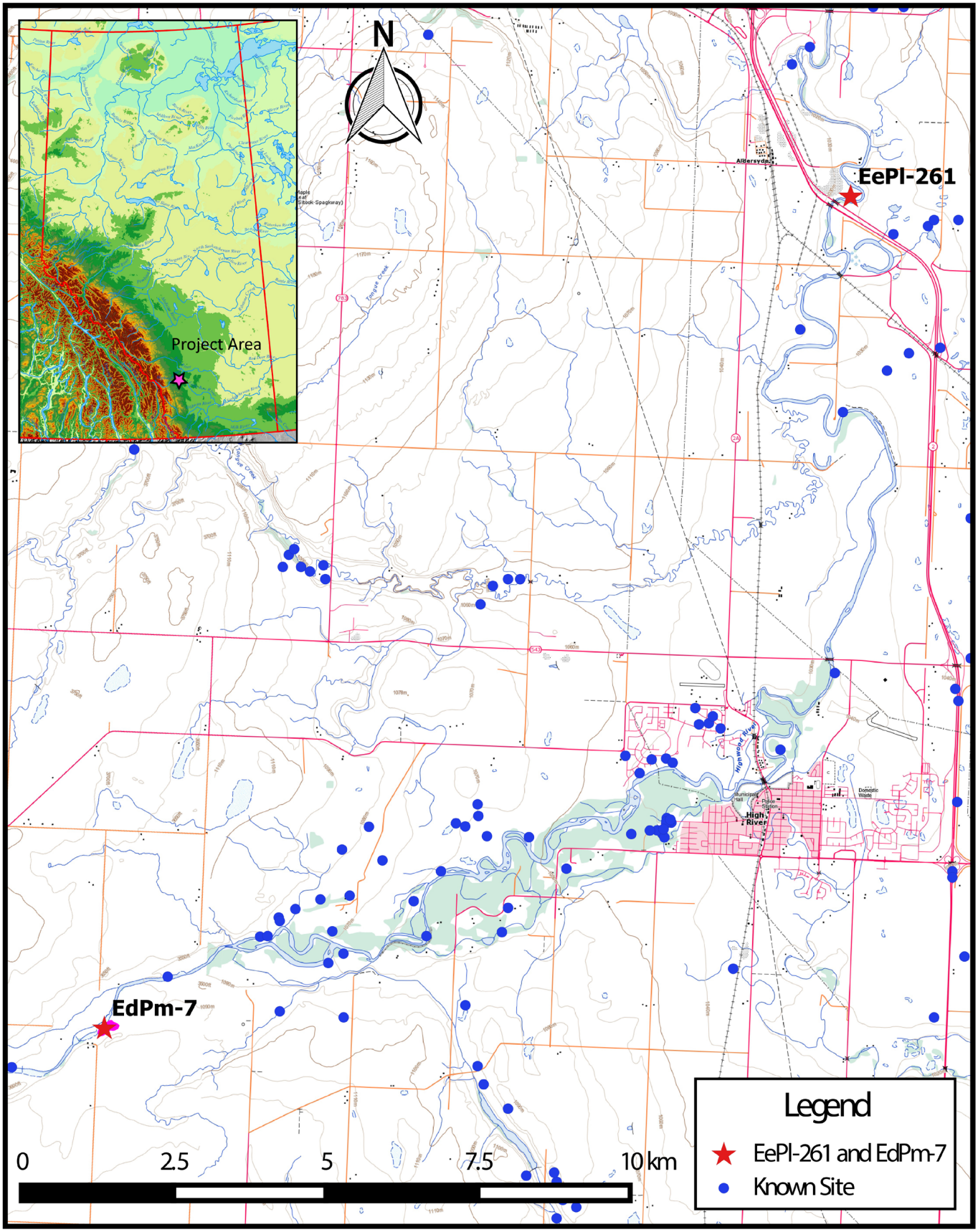

Figure 1. The project area (EePl-261 and EdPm-7).

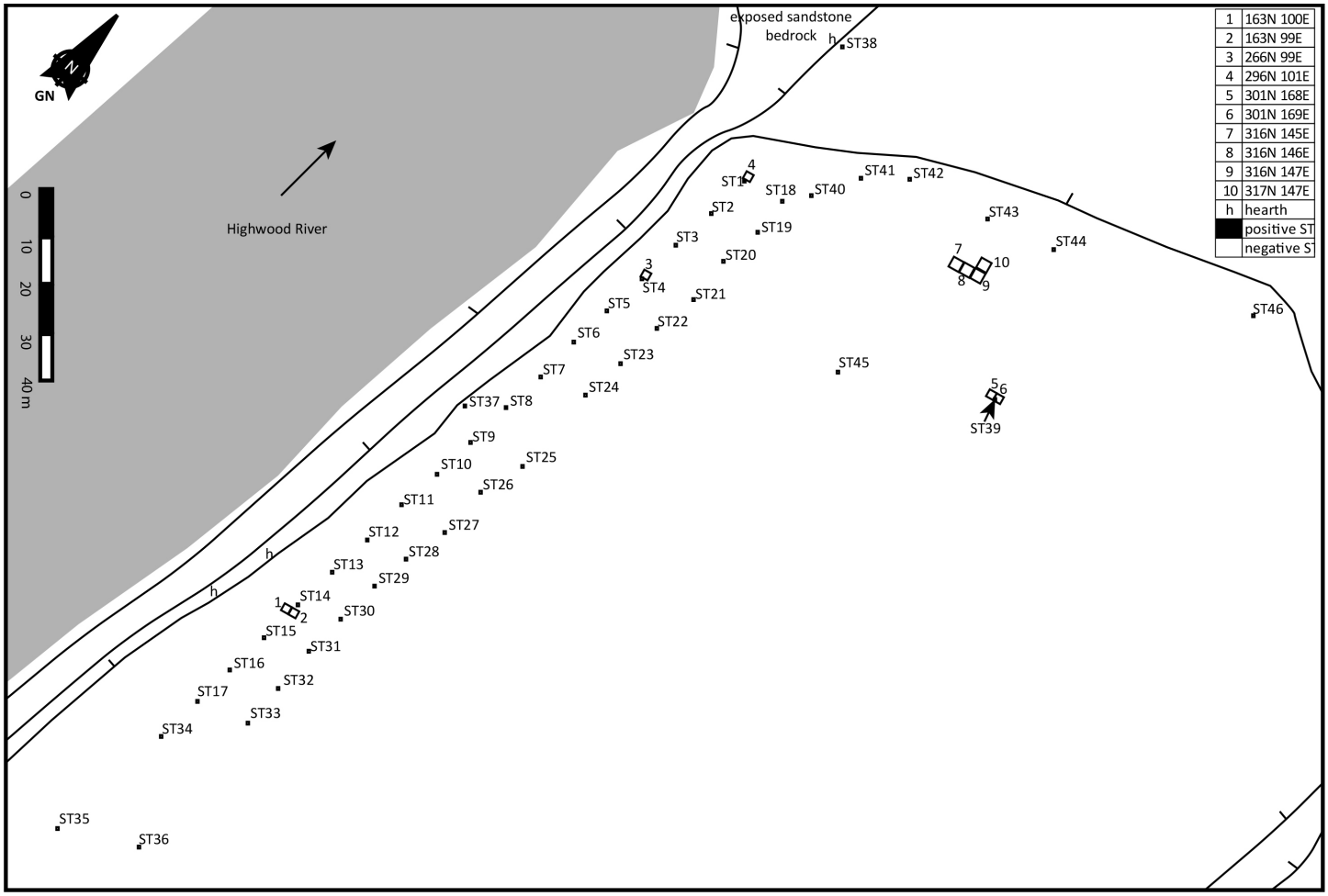

Figure 2. EdPm-7 site map.

blocks of bedrock, pre-existing stratified sediment and till, and/or lenses of glaciolacustrine and/or glaciofluvial sediment (Stalker 1957).

EdPm-7 lies within the Mixed Grass Natural Sub-region of Alberta with vegetation dominated by mixed grasses consisting of blue grama grass, needle grasses, and northern wheat grass (Natural Regions Committee 2006:93). Current vegetation surrounding the immediate site area is characterized by stands of balsam poplar and cottonwood along the river, wolf willow along the southern coulee edge, and prickly rose and other low lying shrubs and grasses across the floodplain. Outside the river valley, most of the land has been turned for agriculture and has been ploughed (Figure 3).

The first stage of work at EdPm-7 included cutbank survey, shovel testing (n=46), and magnetometer survey. The results of these were combined to inform the placement of Stage I excavations of 10 square metres at EdPm-7. Test units were excavated where artifacts had been recovered in shovel tests or where potential features were noted in the magnetometer study (Figures 2 and 4). In total, six lithic artifacts, 251 bones

Figure 3. General view of EdPm-7 from upper terrace, view northwest.

and bone fragments, and seven pieces of fire-cracked rock (FCR) were recovered from these excavations and shovel tests. At the north end of the site, a 1-by-2-metre block (Units 301N 168E and 301N 169E) was excavated, over what was anticipated to be a possible hearth or ring of rocks but turned out to be river gravels near the surface. Nonetheless, a Prairie

Figure 4. EdPm-7 magnetic gradiometry survey (Lunate Consulting).

Side Notched Projectile Point was recovered from this block. A block of four units (316N 145–147E and 317N 147E) was excavated on Magnetometer Hit 3 (Figure 4), where six metal anomalies were identified by the magnetometer (Figure 4). The metal fragments identified by the magnetometer turned out to be modern trash but a second projectile point (Plains Side-Notched) was found here. Unit 296N 101E was excavated adjacent to shovel test one, where a retouched flake had been recovered. Here, a faint hearth feature associated with a small bone scatter, some FCR, and a third projectile point (associated with the Old Women's Phase) were uncovered (Figure 5). Units 266N 99E, and 163N 99–100E were excavated where other anomalies and potential features had been detected by the magnetometer, although no additional features were identified (Figures 2 and 4).

A bison tibia shaft fragment (EdPm-7:63) recovered in association with the hearth feature in Level 1 (0–10 centimetres below surface [bs]) of Unit 296N 101E was submitted for radiocarbon analysis. A conventional radiocarbon date of 120±30 ^{14}C yr BP (before present) was obtained (Beta-453314, collagen extraction; Table 1). Although associated with the hearth, and despite having taken precautions to not contaminate this sample, this date is too recent, considering the assumed Old Women's Phase (1,400 to 200–300 yrs BP) association based on projectile point styles. Its shallow provenience and the Industrial Revolution Effect (Chambers et al. 1979:829; Revelle and Suess 1957:18) have likely affected the result. Alternatively, it may represent a later, more recent reoccupation of the same site location.

Figure 5. Unit 296N 101E south wall profile with ash stain, view south.

Table 1. Radiocarbon dates for EdPm-7 (Roe et al. 2017).

Identifier	Context	Depth (cm bs)	Sample	Conventional Age (BP)
Beta-453314	296N 101E, NW quad (hearth)	0–10	Tibia frag (EdPm-7-63)	120±30

The small artifact assemblage from EdPm-7, including three Old Women's Phase projectile points, a retouched flake (Figure 6), a small sample of bone and FCR, and the hearth feature within this general landscape confirm past use

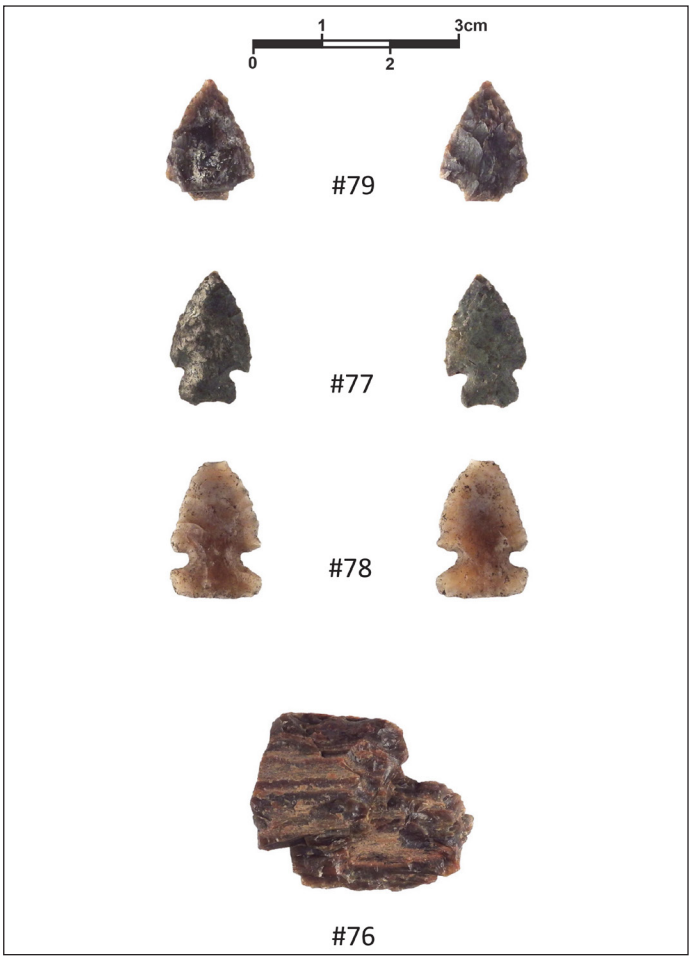

Figure 6. Stone tools recovered from EdPm-7 in 2016.

of this area. Together they indicate that EdPm-7 was likely used as a campsite or procurement site. Figure 7 presents an artistic rendition of the site area as it may have looked during occupation.

3. EePl-261

EePl-261, a stratified Old Women's Phase campsite, is 200 metres east–west by 30 metres north–south on a 5 metre high terrace on the north side of Highwood River (Figures 8 and 9). Most of the surrounding area is relatively flat to rolling terrain typical of an undulating and hummocky till plain. Directly associated with EePl-261 are Pleistocene-age ice-thrust moraine deposits—till formed from the glaciotectonic displacement blocks or rafts in a more or less intact state. The terrain is characterized by high to moderate relief glaciotectonic moraines which include rubble moraine and thrust block moraine.

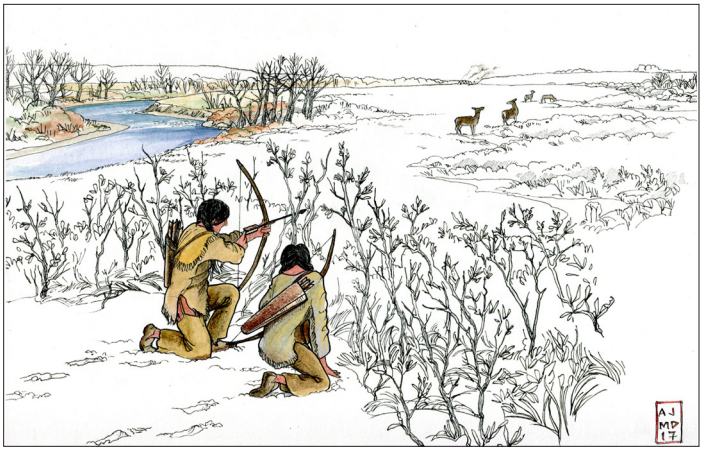

Figure 7. Artistic reconstruction of EdPm-7.

3.1 Methods and occupations

The first step of the work program was to conduct a magnetometer survey of the site area and carry out shovel testing across the site (Figure 8). Following initial tests, excavations were planned to focus on positive shovel tests and locations identified as magnetometry targets (Figure 10). A total of 28 square metres were excavated at EgPn-261: 22 square metres during stage one, and 6 square metres during stage two excavations. The site was divided into east and west portions with excavation blocks placed at opposite ends of the site area (Figure 8). In total, 18 square metres were excavated in the western portion of the site; 10 square metres were excavated as Block One and 4 square metres as Block Two. An additional four dispersed, 1-square-metre units were excavated to assess potential features flagged

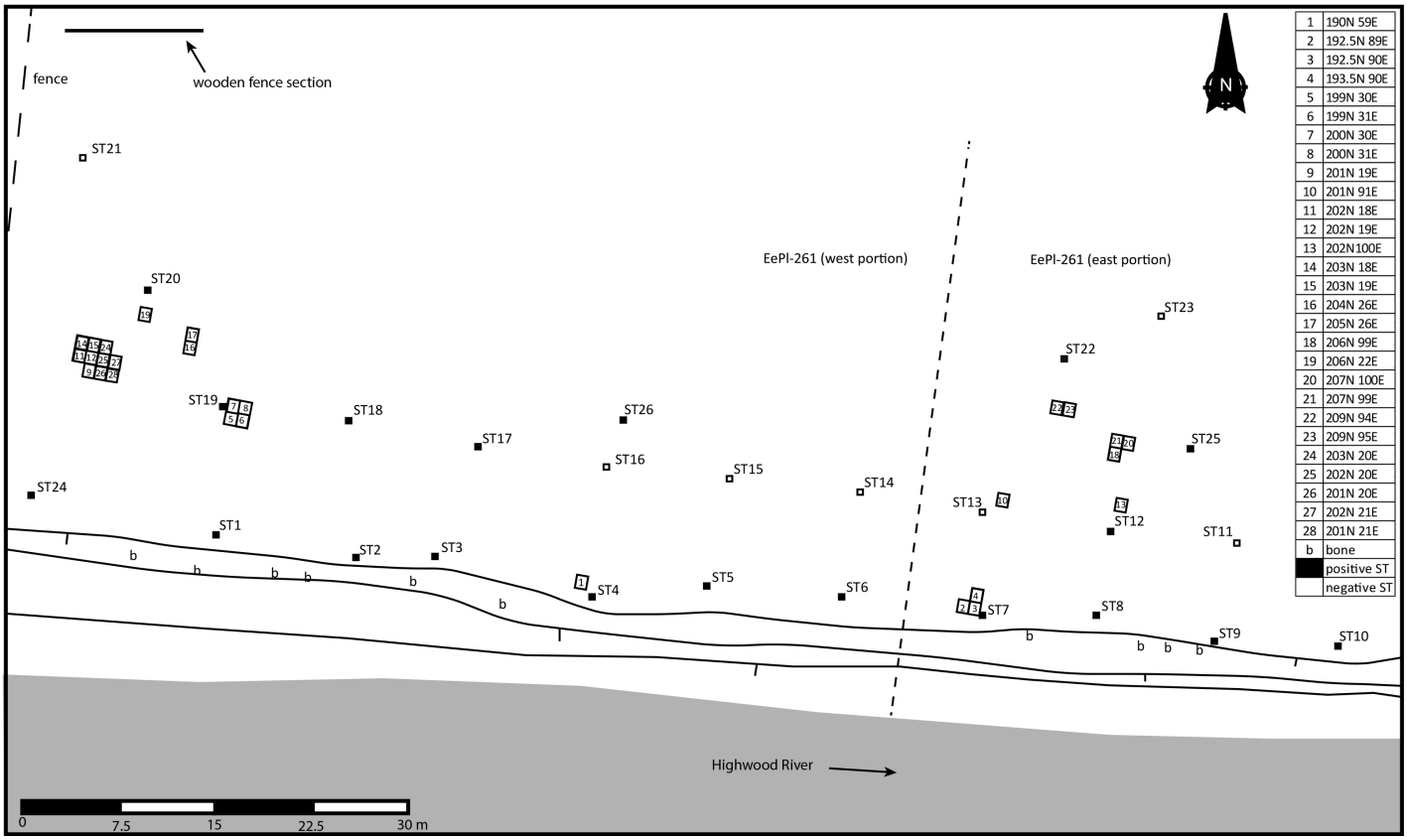

Figure 8. EePl-261 site map.

Figure 9. General view of EePl-261 from small terrace, view east.

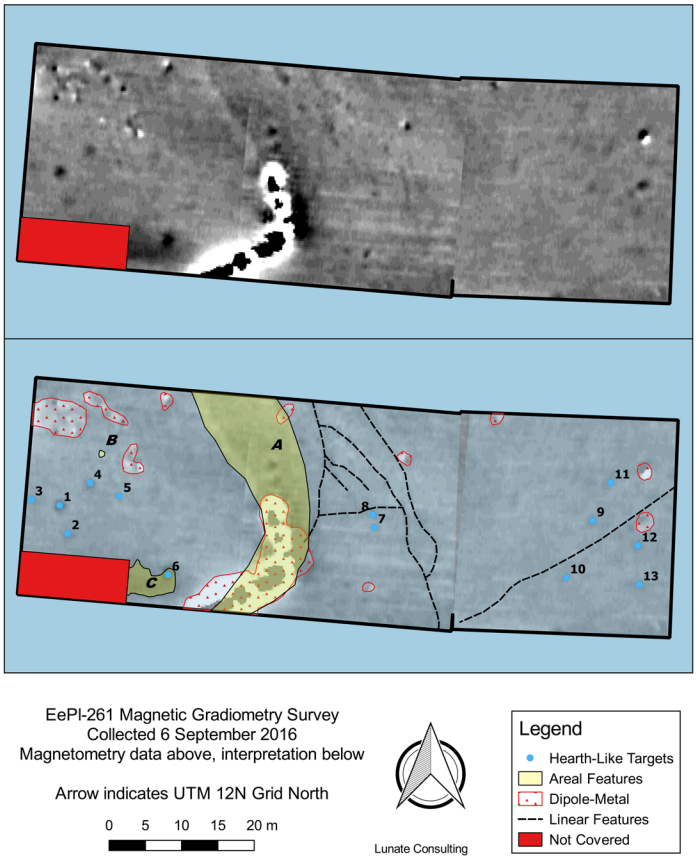

Figure 10. EePl-261 magnetic gradiometry survey (Lunate Consulting).

during the magnetometer survey. The west units were excavated to a maximum depth of 110 centimetres bs or until sterile gravels and cobbles were encountered. Within the east portion of the site, a total of 10 square metres were excavated on or near positive shovel tests or magnetometer hits (Figures 8 and 10). Three 1-square-metre units were excavated as a small block over a roasting-hearth feature. Another three 1-square-metre units were excavated as a second small block on an *in situ* hearth feature. A third block with two units was excavated on another hearth feature (Units 209 N, 94–95E). The two remaining 1-square-metre units were placed on magnetometer hits but turned out to be mostly sterile. The units in the eastern portion of the site were considerably shallower, excavated only to about 60 to 70 centimetres bs. All of the blocks are associated with *in situ* features (discussed below). Together these excavations uncovered a total of eight features and recovered 66 formed stone tools, 1,823 pieces of lithic debitage, 3,349 bone elements, and 192 pieces of FCR.

For the purposes of establishing analytical levels across the excavated units, every attempt was made to follow the natural stratigraphic sequence in unit profiles. This was not always possible where different soil levels were difficult to discern from others above or below or where the defined soil horizons, quite simply, disappeared altogether. In some circumstances, artifacts were recovered from the intermediary sterile levels located between defined pedogenic horizons. Four occupation levels were defined in the west portion of the site, whereas only one was identified in the east portion. Occupation 1 was the youngest occupation and 4, the oldest. Each of the west occupations are close in age and very likely represent repeated occupations separated by flood events. The single occupation identified in the east portion of the site is believed to be associated with the Occupation 2 level identified in the west portion of the site. These are identified in the discussion below as Occupation 2 (east) and Occupation 2 (west).

3.2 Artifacts collected from EePl-261

A total of 3,349 bones and bone fragments were collected during the excavation of EePl-261 (with a total weight of approximately 13.6 kilograms). The majority of the fauna is identified as, or is presumed to be, *Bison bison*. A total of 219 identifiable bison elements (9.3 kilograms) were collected. A minimum number of individuals (MNI) of four bison for the entire site assemblage was determined by the collection of four distal quarters or halves of left tibias. One hundred and twelve bones (307.9 grams) are attributed to at least 11 non-bison species, including deer, and various sizes of canid, rodent, and unidentifiable mammals.

Faunal materials were well-preserved at EePl-261. As a result, three bone bead blanks, five bone bead wasters, and one broken shell bead were recovered from Block 1 Occupation 2 (west; Figures 11 and 12) . The bone bead related artifacts were found in close proximity to a large hearth feature, indicating a likely bead-making work station. A bone

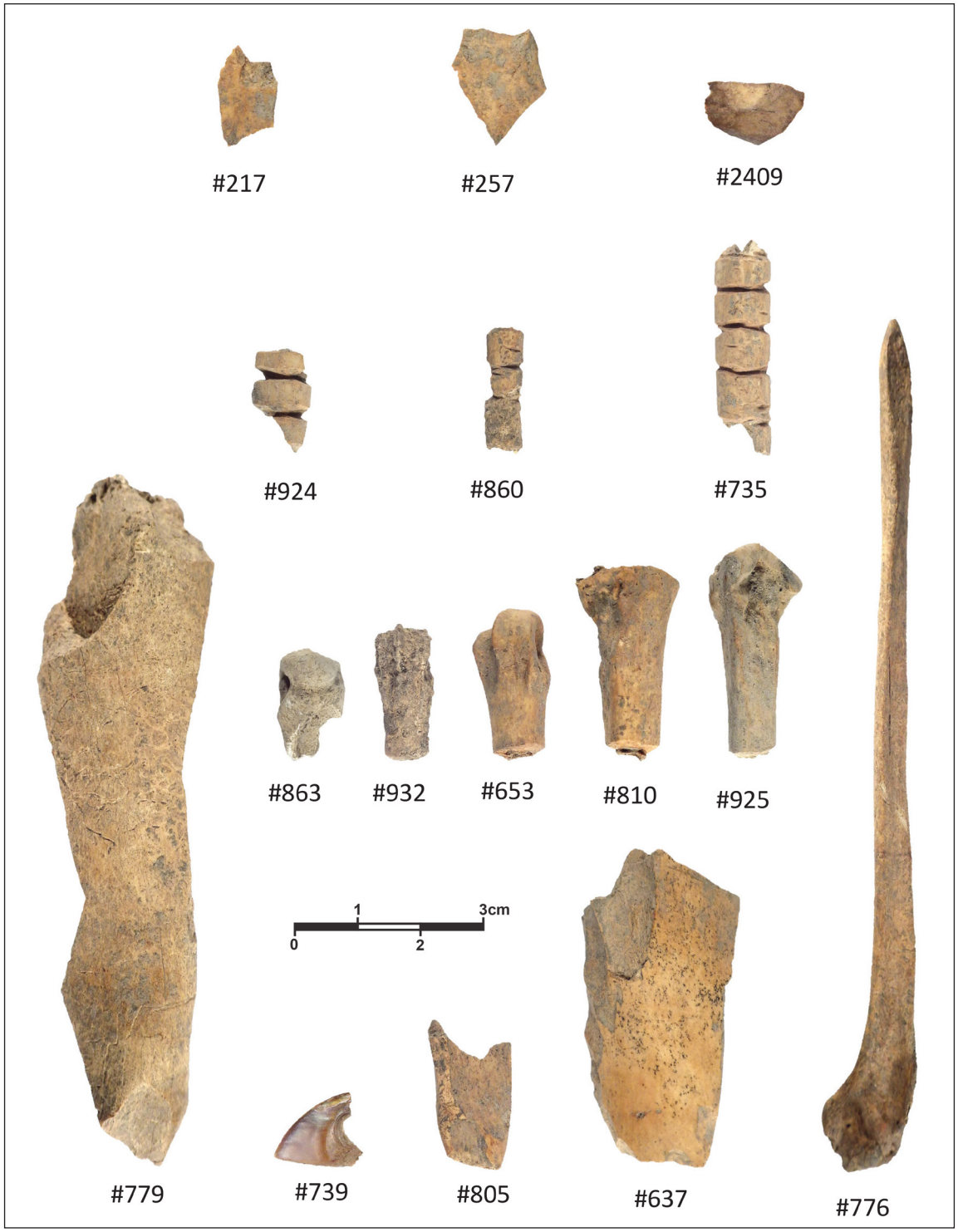

Figure 11. Bone tools and worked bone recovered from EePl-261 in 2016.

awl collected from this same occupation level (Figures 11 and 12), may have been associated with this work area, although it did not show obvious use-wear. Two bone scrapers were also collected from Occupation 2 (west) in association with the same large hearth feature (Figures 11 and 12). The presence of the awl and scrapers is suggestive of leather work being carried out alongside bead making. The presence of bone artifacts points to camp activities centered on the hearth feature.

The lithic assemblage includes 1,823 debitage fragments and 66 stone tools including a wide array of raw material types typical of Old Women's Phase sites (Figure 13). Stone types in this lithic assemblage include Swan River Chert,

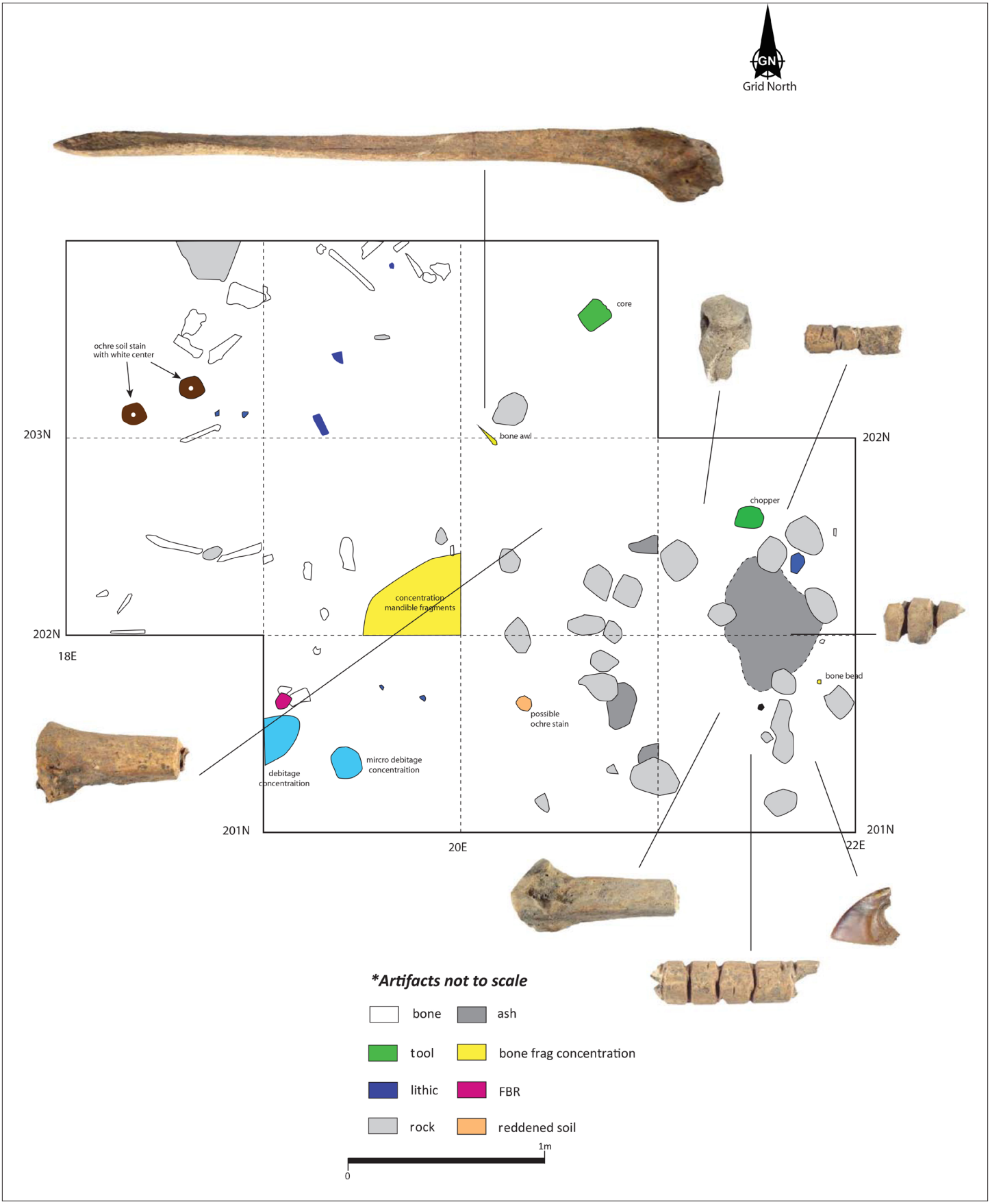

Figure 12. Distribution of features, select bone and shell artifacts from Occupation 2 (west).

Figure 13. Stone artifacts recovered from EePl-261 in 2016.

pebble chert, silicified siltstones, petrified wood, obsidian, Knife River Flint, porcellanite, and Montana cherts (Reeves 2009:32). A number of authors have noted that obsidian is a very common raw material in many Old Women's camp and kill sites (Reeves 1983; Head 1986:18; Brink and Dawe 1989:265; Vickers 1989:29; Unfreed and Van Dyke 2005:206). At EePl-261, obsidian made up 6.2 percent of the total lithic assemblage.

Of particular interest at EePl-261 was the high proportion of Swan River Chert artifacts—a total of 392 pieces making up 28.9 percent of the entire lithic assemblage. This is a higher proportion than any other lithic material type, including quartzite. Swan River Chert occurs locally but it is not as readily available as other toolstones such as quartzite and was, therefore, likely sought out for its superior flaking ability and durability.

The types and varieties of debitage in this assemblage are characteristic of late-stage tool production and maintenance. This was being done to create an assortment of camp-related tools. In the complete assemblage there were 62 primary flakes, 302 early secondary and secondary flakes, 190 shaping/thinning flakes, 219 sharpening/resharpening flakes, 10 bipolar flakes, 120 identifiable pieces of micro-debitage, 856 flakes and micro-flakes, and 64 pieces of shatter.

Most of the lithic tools were found in the west occupation levels. The tool assemblage in Occupation 1 included one projectile point tip, one biface fragment, one scraper, two wedges, and one retouched flake. In Occupation 2 (west), there were nine projectile points/point fragments, four bifaces/biface fragments, two scrapers, two hammerstones, three wedges, one chopper, four retouched flakes, four utilized flakes, one core, and one tried cobble. Recovered from Occupation 3 were four projectile points, two biface/biface fragment, two wedges, and two retouched flakes. Two tools, both retouched flakes, were found in Occupation 4. The tools from Occupation 2 (east) include two biface/biface fragments, four scrapers, one uniface, three wedges, four retouched flakes, and two utilized flakes. Based on the presence of these tools, one can imagine that they were being made and maintained here, while wood and leather were likely worked using scrapers and wedges, and bone was worked into awls, possible scraping tools, and beads. All the while, cooking or stone-boiling related activities were being conducted at this camp location, as is indicated by the presence of FCR among the associated assemblage (see Figure 14 for an artist's interpretation of the camp activities)

3.3 In situ features from the west portion of EePl-261

A total of eight *in situ* features and activity areas were identified at EePl-261. Five of the features were uncovered in the west excavations and three were in the east area. The features in the west include two (possibly three) ochre-sand patches that have been combined into one feature, a heavily used hearth, a sandstone slab and hammerstone workstation, a flintknapping workstation, and a bone bead working station. There is little doubt that these features are contemporaneous and represent a single occupation (Figure 12). Two additional hearth features and a hearth-roasting pile feature were identified in the east half of EePl-261.

The most interesting feature at EePl-261 are the two, possibly three, grapefruit-sized ochre-sand anomalies in Unit 203N 18E and Unit 201N 20E, Level 7 (60–70 centimetres bs) of Block 2 in the west portion of the site (Figures 12 and 15). They have been combined here because of their similarity and uniqueness. The two more clearly-defined patches measure 13 to 15 centimetres in diameter. Their centres consist of fine-grained, pure-white sand that is loose (not cemented) and does not appear to be mixed with any other substance. In stark contrast is the outside or rind, which is a terracotta orange/red ochre substance that is very friable, with the consistency and hardness of fine, water-dried, hardened sediment. There does not appear to be any other visible substance mixed with the ochre-like material. These two obvious ochre-sand features were 2 metres to the northwest of the hearth and were spaced approximately 25–30 centimetres apart. The third potential ochre-sand feature was approximately 1 metre to the west of the hearth, adjacent to the flintknapping workstation.

Figure 14. Artistic reconstruction of EePl-261.

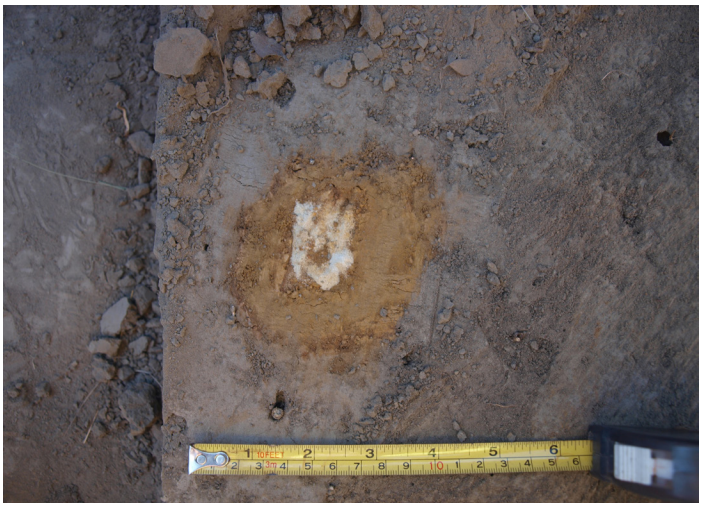

Figure 15. 203N 18E SW quad Level 7 close-up of one of the ochre-sand features.

This third feature was not as developed or as distinct as the other two. To confirm if these features could be degraded geodes, we conducted a thorough examination of sandstone and river detritus in the surrounding area. One geode was noted in loose bedrock along the river but was distinctly different in overall composition to the ochre-sand features.

None of the archaeologists that were consulted about these ochre-sand features had conclusive explanations for their origins or functions. The features may be natural in origin, but their close proximity to one another inside an assumed lodge, near a hearth, a possible sandstone anvil or work platform, and directly associated with flintknapping and bead making stations, suggests a cultural origin.

A cursory literature search for similar anomalies yielded two examples of small anomalous features that bear some resemblance. At EfPk-1 there were, "functionally problematic" (Rogers and Fromhold 1975:8) or "small enigmatic" (Unfreed and Van Dyke 2005:183) ash-filled pits. The second, "A pit-like feature filled with organically stained clayey sediment" (Reeves 1983:26-36; Unfreed and Van Dyke 2005:186) was recovered from the Kenney Site (DjPk-1). Photographs or drawings were not available but this shows that there are other potentially similar features, and that this may be a fruitful area for future research.

Another interesting feature identified at EePl-261 was an intensively used hearth pit encircled with a ring of stones at a depth of 60–70 centimetres bs in Block 2 (Figures 12 and 16). The feature consists of a rock-lined, white ash-filled pit with an ash lens extending out from the top of the pit in a circular pattern. The ground surrounding the pit and below the ash lens is reddened and suggests exposure to fairly high heat. The ring of stones consisted of 23 cobbles spaced approximately 5–15 centimetres apart in a circle around the white ash deposit. This hearth feature measures 153 centimetres north–south (from the outside of the hearth stones) by 110 centimetres east–west (from the outside of the hearth stones), and is 35 centimetres thick, based on the overall thickness of the ash, staining, and depth of the pit. The ash lens is 67 centimetres north–south, by 54 centimetres east–west, and 20 centimetres thick. The ash spilled out over the top of the bowl-shaped depression below. The red-stained, bowl-shaped depression below the ash is approximately 55 centimetres in diameter and 12 centimetres thick. A 50-centimetre diameter pit was dug 15 centimetres into undisturbed sediment to create a bowl-shaped depression. The unmodified cobbles associated with the hearth feature were likely placed around the pit prior to a fire being started. Hearth features such as this are common in precontact sites across southern Alberta. Comparable hearth features of a similar age with an associated ring of stones exist at the Junction site near Fort MacLeod. The first of these was recorded in Area A (Unfreed and Van Dyke 2005:58), and another in Area BH-1 (Vivian and Blakey 2016:13). Another similar hearth is described from EgPn-506 in Calgary (Vivian et al. 2006:219).

Figure 16. Block 2, Occupation 2 (west) large hearth feature with exposed ash profile, view east.

A sizable sandstone slab was observed in Unit 203N 18E, Level 7 (60–70 centimetres bs) (Figure 12). Only a portion of the slab was exposed by the 2016 excavations. As such, it was left *in situ* for future excavations. The rock measured approximately 20 centimetres north–south by 30 centimetres east–west and 12 centimetres thick. There was no obvious use-wear scratching, pitting, streaking, or flaking noted on its surface. Given the large amount of sandstone bedrock detritus along the riverbank, this could be natural, however, there are other features directly associated with this slab (Figure 12), so it is not likely natural or even a simple manuport. Some potential interpretations for the use of the slab could be as an anvil, a workstation/table for making bone beads, or as a lightly-used mortar. Alternatively, it may have served an architectural purpose to produce a better seal in winter on a tipi, or served as a seat or shelf. Contemporaneous sites with comparable features include a sandstone slab associated with a hearth at the Balzac site (Head 1986, 1988), and at the Hartell Creek Site (EgPi-1), which is another Old Women's Phase site (Unfreed and Van Dyke 2005:176; Murray et al. 1976).

In a camp environment, we assume that flake and preform preparation was done elsewhere and that mostly late-stage products were brought back to camp to be finished, used, rejuvenated, and ultimately discarded. There was a significant amount of debitage recovered adjacent to the large hearth described above, and this concentration suggests that the area is a flintknapping station (Figure 12). In addition, two hammerstones (EePl-261:2275 and 2249; Roe et al. 2017:Plate 52:1 and 2) may be associated with this workstation. The sand-

stone slab described above may also be related to lithic-working activities. A wide assortment of toolstone and varied suite of tools were recovered from Block 2, suggesting intensive lithic tool manufacture and use, possibly during cold seasons.

3.4 In situ *features in the eastern half of EePl-261*

Three camp-related features were identified and recorded in the eastern portion of EePl-261. These include three hearths, one with an associated roasting pile (Figure 8). All of these features are associated with the cultural Occupation 2 (east) layer that correlates these occupations with the Occupation 2 (west) features discussed above. The roasting pile and associated hearth feature was identified in shovel test seven (though it was not identified during the magnetometer survey), and a 3-square-metre block was opened to expose the feature (Figure 8). The block is directly adjacent to the river terrace and the pit feature was found at a depth of 40–50 centimetres bs (Figure 17). Although we captured a significant portion of the feature in our excavation, due to buffering restrictions on the river edge to minimize erosional impacts to the site, we were unable to capture it in its entirety. The roasting pile is approximately 70 centimetres north–south by 100 centimetres east–west. A total of 96 pieces of FCR (24,303 grams) were associated with the feature. These FCR cobbles appear to have been tightly packed together directly on the ground surface and not set in a depression. Additional FCR fragments scattered adjacent to the main concentration were likely moved post-depositionally.

Figure 17. Roasting pile and hearth feature (Units 192.5N 89/90E, Level 5) from Occupation 2 (east), view north.

Directly east of the FCR pile was a large, reddened hearth stain, which was only partially exposed by our excavation due to the terrace edge buffering. However, a significant portion was captured within the block (Figure 17). The exposed portion of the stain is 40 centimetres north–south by 50 centimetres east–west and includes a small depression excavated into sterile sediment. An ash lens, approximately 5 centimetres thick, was noted overlying the burnt terracotta red/orange stain. Minimal charcoal or other burnt material was noted in the ash lens.

The hearth and roasting pit are undoubtedly directly related, and attest to cobble-heating in a fire and then adding cobbles to the immediately adjacent pile. It is more difficult to determine whether this feature was used to roast meat, legumes, seeds/nuts, or a combination. Similar features were recorded in Area A at the Junction Site (Unfreed and Van Dyke 2005:63) and at EgPn-506 (Vivian et al. 2006).

A second hearth stain was excavated in a small, 3-square-metre block (Units 207N 99E and 207N 100E; Figure 8), at a depth of 40–50 centimetres bs. This was identified as a target area during the magnetometer survey (Figure 10). The hearth feature measures approximately 80 centimetres north–south by 60 centimetres east–west and is approximately 7-9 centimetres thick. The associated sediments consist of a small amount of mottled ash mixed with a thick, red-stained soil deposit. No burnt bone was observed in or on the staining. A thin band of mixed charcoal was identified along the west side of the stain. An assortment of lithics, including two bifaces, a scraper, and six retouched and/or utilized flakes were recovered from directly west of the hearth. In addition, 263 bones and bone fragments (619.8 grams) were recovered from this block, including an articulated canid vertebrae. Although bone from multiple canids in this area were recovered, these were neither burnt nor had notable cut marks; nonetheless, their presence here is likely cultural, and may be related to bone bead manufacturing.

The third hearth feature was excavated in a 1-by-2-metre block (Units 209N 94E and 209 95E; Figure 8) at around 35–38 centimetres bs, and continued north into Unit 210N 95E, which was not excavated. This feature was noted as

a potential target by the magnetometer study (Figure 10). This hearth was considerably fainter and less defined than the other two east hearth features. The hearth measured approximately 40 centimetres north–south by 60 centimetres east–west and 3 centimetres thick. A total of 191 bones and bone fragments, six lithic tools (including two scrapers, one uniface, two wedges, and one utilized flake), and one piece of FCR were recovered from the immediately adjacent area, suggesting that a variety of tasks were performed around this hearth.

3.5 Dating of EePl-261

EePl-261 is a precontact multi-occupation campsite on the north bank of the Highwood River. Radiocarbon dates and diagnostic artifacts all confirm that this site was occupied multiple times during the Old Women's Phase (1,200–200 years BP). Three bone samples from EePl-261 were submitted for radiocarbon dating, with resulting dates that are extremely close together and fall within the same date range based on their degrees of error (Table 2). The conventional radiocarbon ages of the samples (in ^{14}C yr BP) are 310±30, 340±30, and 380±30 (Beta-453312, -453311, and -453313; collagen extraction). This tight sequence correlates nicely with the stratigraphy and suite of recovered artifacts (especially projectile points), indicating multiple Old Women's Phase occupations, occurring simultaneously or within a fairly tight span approximately 350 years ago. Although not identified in our excavated assemblages, older material is probably present at EePl-261, likely to the north or possibly on the higher terrace to the west.

Table 2. Radiocarbon dates for EePl-261 (Roe et al. 2017).

Identifier	Context	Depth (cm bs)	Sample	Conventional Age (BP)
Beta-453311	Unit 207N 10E, NE quad (hearth)	30–40	bone (EePl-261-81)	340±30
Beta-453312	Unit 201N 21E, SE quad (hearth)	60–70	bone (EePl-261-742)	310±30
Beta-453313	Unit 200N 30E, NW quad (hearth)	70–80	bone (EePl-261-348	380±30

4. Conclusions

These two sites excavated as part of the 2016 southern Alberta flood investigation program along the Highwood River offer valuable information concerning Alberta's past. The results from this program can be used to develop future management strategies that may be employed to best conserve these sites. Both EePl-261 and EdPm-7 have been recognized as belonging to the Old Women's Phase, the archaeological representation of the *Nitsitappi* (Blackfoot speaking peoples; Reeves and Peacock 2001; Reeves 2009). The assignation of these sites is informed by the presence of culturally diagnostic stone tool types such as small Plains Triangular and Plains Side Notched points, distinctive hafted knives, end scrapers, and wedges. Figures 7 and 14 present artistic renditions of these two sites and activities as they may have occurred. In particular, these sites were likely occupied by ancestral Piikani as these lands are part of their traditional territory along the western edge of the plains and eastern slopes of today's Southern Alberta and Northern Montana (Reeves and Peacock 2001; Reeves 2009).

5. Acknowledgements

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