

A Tale of Two Sites: Examining Two Proto-Historic Bison Kills in the Calgary Area

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Recent archaeological investigations in the city of Calgary area undertaken by Lifeways of Canada Limited have uncovered two Proto-Historic bison kill sites, EgPn-430 (Area 6) and EhPn-45. A contextual examination of these sites offers a chance to further our understanding of shifting hunting strategies and technologies during this transitional period. Whereas these two sites are diverse in terms of scale, environmental setting, hunting strategies employed, there are still interesting similarities and comparisons that can be made between these two Proto-Historic sites.

INTRODUCTION

The introduction of European trade goods is considered to mark the Proto-Historic Trade Period in Alberta, which in general dates to ca. 1700-1790, after which the Historic Period began (Pyszczyk 1997, Vickers 1986). As it is defined, the Historic Period is marked by direct trade contact between European posts and the Blackfoot of Southern Alberta (see Figure One). The subsequent adoption of European technologies would have greatly influenced Native material culture in Southern Alberta. Very little from an archaeological perspective has been known about these Periods and the transitions between them.

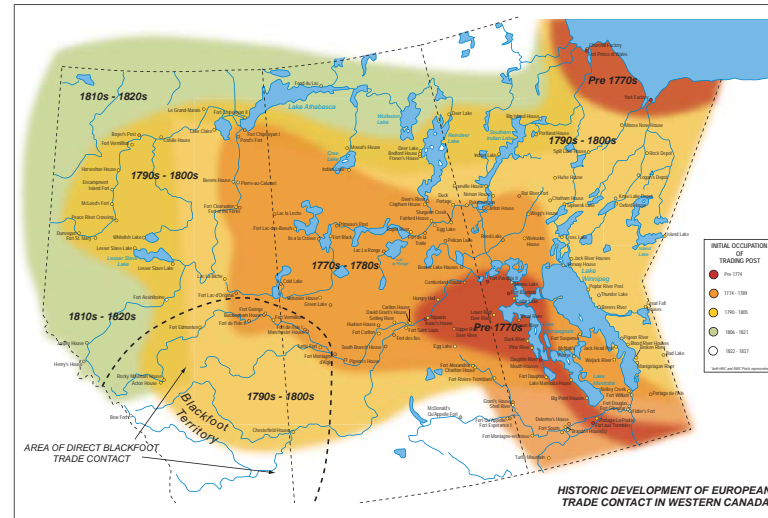


Figure 1. Historic Development of European Trade Contact in Western Canada and the Area of Direct Blackfoot Trade.

Recent excavations undertaken in Calgary area have uncovered two Proto-Historic bison kill sites EgPn-430 Area Six and EhPn-45 (Grey Meadows) (see Figure Two). A contextual examination of these sites offers a chance to further our understanding of the significant changes, transitions, and adaptations taking place in Southern Alberta as a result of European influences.

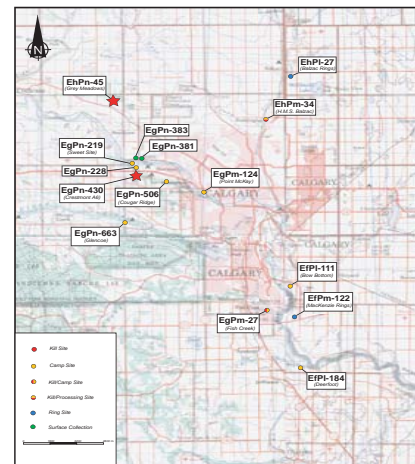


Figure 2. Distribution of known Proto-Historic Period Native Sites within the Calgary area and List of associated European Trade Goods.

Site	Name	Site Type	Metal Points	Beads	Other
EgPn-430 AREA 6	Kill/Camp		7 (iron)	1	antelope/buffalo/steep
EgPn-430 AREA 4	Camp		11 (iron)	1	gunflint
EgPn-506	Camp		18 (iron)		
EgPn-219	Sweet Site				gun part
EgPn-228	Camp			1	
EgPn-506	Surface Collection		1 (iron)		
EgPn-381	Surface Collection		1 (iron)		
EgPn-383	Surface Collection		1 (iron)		
EgPn-403	Camp			1	glass scupper
EgPn-124	Camp				
EgPn-111	Point Bottom				tobacco brand
EgPn-184	Camp		2 (iron)		
EgPn-27	Fish Creek	Kill/Camp	1 (iron)	4	
EgPn-122	Ring Site		1 (iron)		
EgPn-27	Ring Site		1 (iron)		
EhPn-45	Grey Meadows	Kill	4 (iron)		
EhPn-34	Basin Site	Kill/Processing	1 (iron)		

*The Historic Component of this site was not excavated, but historic trade materials were subsequently observed in surface disturbances at the site.

EgPn-430 AREA SIX



Plate 1. EgPn-430 Area Six, View Southeast, Fall 2003 Mitigation. Plate 2. EgPn-430 Area Six, Portion of Bone Bed.

EgPn-430 Area Six (see Plate One) is one of two bone beds and associated processing camps that indicate a spring located on the NW corner of the Paskapoo Escarpment has been used on as a location to hunt bison for almost 4000 years (Vivian et al 2005). In total 102.5m² were excavated as part of the assessment and mitigation programs undertaken in 2003 at Area Six (see Plate Two). Excavations revealed that at least 83 bison were killed and butchered during the late summer or early fall. The majority of the faunal assemblage consisted of unsorted and highly fragment/processed elements. Interestingly, the seemingly random distribution of bone elements across the kill indicates that primary butchering activities were not highly coordinated as a group activity.

Stone projectile points were recovered during excavations at EgPn-430 Area Six (see Plate Three). Historic artifacts found within Area Six include both copper and iron arrowheads, an iron file, glass bead and a brass button indicate this last kill event dates to ca. 1830 +/- 10 (see Plates Four and Five).



Plate 3. EgPn-430 Area Six, Stone Projectile Points. Plate 4. EgPn-430 Area Six, Copper Projectile Points.

The discovery of a brass button, glass bead and elk tooth pendant supports the suggestion that individuals wore personal adornments even in the midst of a kill (see Plate Six).



Plate 5. EgPn-430 Area Six, Metal Artifacts and Glass Bead. Plate 6. EgPn-430 Area Six, Elk Tooth Pendant.

EhPn-45 GREY MEADOWS



Plate 7. EhPn-45 Grey Meadows. Plate 8. EhPn-45 Grey Meadows, Portion of Bone Bed Excavated.

EhPn-45 is a bison kill located in the Rocky Ridge area of Calgary in a locale where previous archaeological surveys have indicated that kill sites are highly unusual (Vivian et al n.d.) (see Plate Seven). The bone bed at EhPn-45 is characterized by numerous faunal elements from at least 28 individuals found scattered across the hillside in manner indicating these buffalo were killed in a surround or chase on horse back (see Plate Eight). Several complete horse elements mixed in with the bone bed indicates a horse probably snapped its leg while participating in the buffalo chase (see Plate Nine) Diagnostic Projectile Points found here include copper, iron and stone arrow points (see Plate Ten).



Plate 9. EhPn-45 Grey Meadows, Horse Elements Recovered. Plate 10. EhPn-45 Grey Meadows, Stone and Metal Projectile Points.

Unlike most traditional Pre-Contact kill sites, the absence of specific bone elements within the bone bed indicates many larger meat cuts were systematically removed from EhPn-45 (see Plates Eleven and Twelve). It is believed that the presence of horses allowed for heavier portions of the bison to be easily transported back to a base camp for further processing.



Plate 11. EhPn-45 Grey Meadows, Example of In Situ Articulations. Plate 12. Historic Photo of Butchering a Bison.

DISCUSSION AND CONCLUSIONS

The presence of metal projectile points, a metal file, a brass button, a glass bead as well as horse bones at these two sites indicates that European trade goods were supplementing Native material culture. Beyond the temporal similarities of these sites both have butchery marks attributable to metal/copper implements (see Plates Thirteen and Fourteen). The presence of both metal and stone tools at each site indicate that although traditional techniques were undergoing modification they were not altogether abandoned.



Plate 13. EhPn-45 Grey Meadows, Example of Butchering using Metal Tools. Plate 14. EgPn-430 Area Six, Example of Butchering with Metal Implements.

The highly fragmented and pulverized bones found at EgPn-430 Area Six indicate that faunal assemblage was extensively processed and entirely utilized. Characterized by markedly small adults and juveniles the assemblage at EgPn-430 Area Six indicates that local bison populations were under severe environmental/hunting stress by the early 1800s.

Despite a greatly altered material culture, the longevity and success of the bison hunting tradition in Plains Indian lifeways are reflected in these two kill sites. Excavations at both EgPn-430 Area Six and EhPn-45 have significantly contributed in elucidating the nature of change, adaptations, and stability in the Northern Plains cultures of Southern Alberta in the face of great changes brought by the arrival of Europeans.



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