

Investigations of Small Circular Cultural Depressions at the Keatley Creek Site

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Over the last twenty years, many prehistoric winter pithouse villages have been investigated on the Canadian Plateau. The focus of most previous research has been examination of house interiors. Consequently, small circular cultural depressions associated within and near winter villages have been largely ignored, despite their potential to further our knowledge about prehistoric subsistence matters.

In the last two decades, however, a small number of small circular cultural depressions have been minimally examined (Von Krogh 1978; Pokotylo and Froese 1983; Carlson 1980; Richards and Rousseau 1982; Lawhead et al. 1988). Not surprisingly, most of these features were revealed to be food roasting pits (earth ovens) or storage pits, constructed and used in accordance with the ethnographic record (Teit 1900, 1906, 1909).

The 1988 investigations of small circular and oval cultural depressions at the Keatley Creek site were initiated to examine the internal structure, contents, and purpose(s) of a variety of small depressions with surficial dimensions ranging between 1.5m and 4.5m in diameter by .5 to 1.0m deep. Such small depressions are relatively common (but not abundant) at Keatley Creek; most are associated with housepit rims, or in small isolated clusters on the periphery of the site (This volume, Preface, Fig. 1).

All twenty-one of the depressions initially examined were judgmentally selected with two important considerations in mind. First, those not associated with parts of the site that had been extensively excavated or disturbed by prehistoric activity were preferred. It was reasoned that this

would help reduce the possibility of previous disturbance or stratigraphic obscuration caused by aboriginal digging activities and/or depositional events (i.e. refuse and ash dumps) not directly related to the primary function of the pit.

Second, an attempt was made to select and examine a wide range of small depression features with notable surficial morphological and/or dimensional variability to determine whether the formal differences could be linked to functional differences. It has often been assumed (perhaps erroneously) that small circular depressions at pithouse sites functioned almost exclusively as storage pits and earth ovens, and that their structure and expected contents conform to the ethnographic data. This has never been adequately tested during previous research projects, though.

During the 1987 field season, a small circular cultural depression was intersected by extra-housepit excavation (EHPE) 5. In 1988 another seven small depressions of varying form were investigated (EHPEs 7 to 13) between June 15 and August 1. EHPEs 14 to 23 have been excavated since that time; EHPE 14 was found to be a natural feature and will not be dealt with further. Detailed descriptions for each depression and findings of respective investigators are presented in the rest of this chapter. The more salient or notable characteristics indicated by the sample of excavated features are summarized here.

Excavations revealed that small circular depressions at the Keatley Creek site are highly variable with respect to their internal structure, intended function(s), and use-histories. Seven pits were determined to be surprisingly shallow, saucer-shaped and small to medium in size (EHPEs 2, 8, 12, 13, 15, 17, 23); another seven are medium sized, U-shaped or basin shaped, and moderately deep (EHPEs 4, 5, 7, 9, 16, 18, and 21); one is flat-bottomed

(EHPE 11); and the last five are very large and moderately deep to deep (EHPEs 3, 10, 19, 20, and 22).

Eleven depressions were determined to have initially functioned as storage pits (EHPEs 4, 5, 7, 8, 9, 10, 13, 16, 19, 21, and 22). Six depressions (EHPEs 5, 7, 9, 10, 19, 21) are superficially and internally consistent with the classic ethnographic descriptions for "cachepit" (i.e. food storage) features (Teit 1900: 198-199). Their initial use contains fish (salmon) remains, mammal bones, and birch and conifer bark. At least five of these pits (EHPEs 5, 7, 19, 21, and 22) indicated having been infilled by intentional and/or unintentional aboriginal activity subsequent to being abandoned as a storage feature. Construction of fires in partially infilled storage pits, and/or dumping of hearth refuse is indicated in EHPEs 4, 5, 10, 13, and 16. Both of these activities appear to have been common at the site.

Two of the shallow saucer-shaped depressions (EHPEs 8 and 13) were also interpreted to be storage pits on the basis of their contents, but because they were so shallow, they must have had very little storage space if they were constructed with a flat-topped cover. Alternatively, it is possible that conical roofs comprised of small poles, earth, and bark (i.e. a miniature pithouse) were erected over these features to afford greater interior storage capacity. If the latter is true, it indicates the existence of a storage facility not mentioned in the ethnographic literature.

A superficially deep depression (EHPE 10) was determined to also be moderately deep internally, have vertical walls, and have considerable storage capacity. Its bottom yielded a large quantity of fish bone (salmon?) and remains of a large mammal (elk?). The latter suggests that dried meat may have been stored in it, or possibly that bones were discarded there immediately after its use as a storage facility had expired.

One depression (EHPE 11) contained two horizontal use/occupation episodes. The nature of the cultural materials associated with these events suggests that this feature may have been a small single-person dwelling, but it lacks any indication of internal hearths. Alternately, it could also have been an above-ground storage structure with a conical or lean-to like roof where wood, non-perishables, and possibly food might have been stored.

Another shallow depression (EHPE 12) appears to have been a large saucer-shaped outdoor hearth area belonging to the Lillooet Phase (2400-1200 BP). It contained an abundance of smashed and burnt animal bone, discarded lithic tools and debitage, ash, fire-cracked rock, partially burnt bark, and charcoal.

The results of the inquiry suggest that not all small circular cultural depressions can be assumed to have functioned as classic "cachepit" features or earth ovens as described in the ethnographic literature. It may be that shallow storage pits with above-ground roofs were commonly used by the inhabitants of Keatley Creek, particularly in parts of the site where Holocene deposits are thin, and the underlying glacial sterile deposits are very difficult to penetrate and seasonally frozen. Also, some of the depressions with comparatively larger diameters (i.e. 4-5 m) and shallow bottoms may have been short-term, single person dwellings. Although sweat lodge features have yet to be confirmed on the site, it is possible that they also exist, and fall within the size range of depressions investigated during the 1988 study. There is no reason to believe that many, if any, of the small depressions were being used preferentially for the disposal of butchered mammal bone.

Much remains to be learned about subsistence practices during the last 3500 years or so on the Canadian Plateau. Continued intensive

investigations of small circular depression features in a variety of contexts will undoubtedly contribute much toward this end.

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**Table 1: Size, Depth, and Primary and Secondary Interpreted
Functions of all
Extra-Housepit Excavations at Keatley Creek.**

EHPE #	SIZE	DEPTH	FAUNAL ASSOCIATIONS	PRIMARY FUNCTION	REUSE ?	SECONDARY FUNCTION
2	Small	Shallow	Mammal	Hearth	No	
3	Large	Moderate		Dwelling	Yes	Hearth
4	Medium	Moderate		Storage	Yes	Storage, Hearth
5	Medium	Moderate	Fish, Mammal	Storage	Yes	Hearth
7	Medium	Moderate	Fish, Mammal	Storage	Yes	Refuse Dump
8	Medium	Shallow	Fish, Mammal	Storage	No	
9	Medium	Moderate	Fish, Mammal	Storage	No	
10	Large	Deep	Fish, Mammal	Storage	Yes	Hearth
11	Medium	Moderate	Fish, Mammal	Dwelling	Yes	Dwelling or Storage
12	Medium	Shallow	Mammal	Hearth	Yes	Hearth
13	Small	Shallow		Storage	Yes	Hearth
15	Small	Shallow	Mammal	Roasting	Yes	Roasting
16	Medium	Moderate	Mammal	Storage	Yes	Hearth
17	Small	Shallow	Deer	Roasting	No	
18	Medium	Moderate	Salmon, Mouse, Deer	Roasting	Yes	Storage
19	Large	Deep	Salmon, Bird, Mammal	Storage	Yes	Roasting
20	Large	Deep		Roasting (Plant)	Yes	Roasting (Plant)
21	Medium	Moderate	Salmon, Horse	Storage	Yes	Storage
22	Large	Deep	Fish, Bird, Mammal	Storage	Yes	Storage
23	Small	Shallow	Mammal	Roasting (Plant)	Yes	Roasting (Plant)