

Moose Jaw Museum and Art Gallery Besant Phase Pottery Vessel

By Todd Paquin

Introduction

The Moose Jaw Museum and Art Gallery (MJMAG) houses a large collection of precontact aboriginal pottery that originated from several sites in southern Saskatchewan, though very little provenience information has been found with the sherds. Through the cooperation of the MJMAG and funding from a Special Activities Grant from the Saskatchewan Archaeological Society (SAS), the author and a SAS volunteer, Mr. Jack Trusty, catalogued lip, rim and neck sherds within this collection in November and December, 1999. Eventually, it was possible to separate the catalogued lip sherds into 88 vessels. Many vessels possess traits commonly associated with the Mortlach phase or the Moose Jaw culture/Wascana ware (Malainey 1991; Walde 1994) while two compare well with Old Women's phase pottery (Green 1993; Meyer 1988; Novecosky 2003; Paquin 1995).

However, one box of pottery with a note reading "April 26, '36, north of Mortlach" contained a collection of sherds exhibiting stylistic, morphological and construction traits described for the Besant Phase. Besant material culture was observable on the Northern Plains during a time period as early as approximately 2,300 and extending to as late as approximately 1,100 BP (Dyck 1983:120; Dyck and Morlan 2001:124; Hjermstad 1996:29; Morlan 1988:305, Vickers 1994:13-14, Walde et. al 1995). In Saskatchewan, Besant generally dates to between 2,000 and 1,150 BP. Pottery from the Besant Phase is the earliest known on the Canadian Plains.

Several people collected archaeological materials from sites in the vicinity of the village of Mortlach in south-central Saskatchewan, including Kenneth Harris Jones and Allan Hudson (Wettlaufer 1951:92-98) (Figure 1). Mr. Hudson collected or excavated materials including pottery from the Mortlach site (EcNm-1) vicinity and from a number of other sites surrounding Mortlach. However, Wettlaufer (1951:92-95) notes that Mr. Jones collected pottery from several locations in vicinity of Mortlach and the "greatest part of his collection comes from north of Mortlach where the blows seem to follow an old drainage system" (1951:92).

Mr. Jones lived in Mortlach at the time of Wettlaufer's study and had been collecting in the region since 1918. While Mr. Jones primarily collected from a square comprising Sections 26, 27, 34, and 35-17-1 W2M, of which Mortlach formed the southwest corner (Dr. Dale Walde, pers. comm., August 1, 2019), he did recover materials from a larger area around Mortlach. Wettlaufer (1951: 92-95) described seven of Jones' collection areas, labelled S-153 to S-159 (EcNm-1 vicinity; EcNm-1, 2, and 3; EdNm-1, 2, and 3), of which S-153, S-154, and S-157 (EcNm-1, EcNm-1, EdNm-2) produced pottery (Figure 1). In addition, he illustrated four locations at which Jones collected pottery (Wettlaufer 1951:94). This included the EcNm-1 vicinity and EdNm-2, which are described in the survey report, while the two other collection spots estimated to be within approximately 8 km northeast of Mortlach do not appear to have been described.

The S-157 (EdNm-2) location approximately 7 km north-northwest of Mortlach produced a variety of potsherds (Wettlaufer 1951:96). Site EdNm-6, recorded after Wettlaufer's survey in the adjacent Section to the east, produced Plains, Besant, Pelican Lake, McKean, and Oxbow temporally-diagnostic artifacts. While it is not possible to assign the box of pottery sherds in question to any one site in particular documented by Wettlaufer or during subsequent studies, there does appear to be justification for considering it as part of Kenneth Harris Jones' collection that originated north of Mortlach.

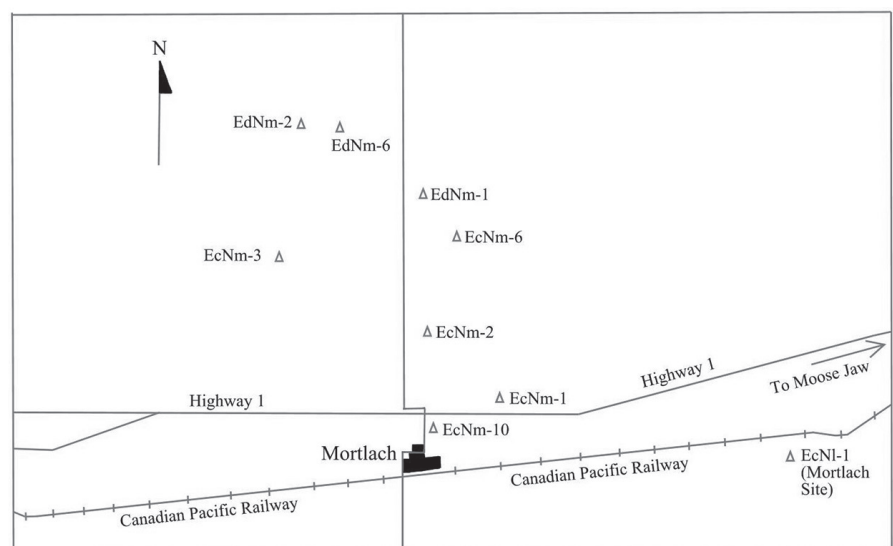


Figure 1: Location of various Mortlach-area archaeological sites recorded by Wettlaufer (1951) or noted in the text.

The purpose of this article is to provide a detailed description of the pottery sherds originating north of Mortlach. Comparisons will be made with pottery recovered from known Besant Phase sites in an effort to determine if these sherds fit within the known range of stylistic, morphological and construction traits noted for the phase.

The Besant Phase

The Besant Phase was first described in 1955 by Boyd Wettlaufer based on excavations at the Mortlach site (EcNI-1), just east of Mortlach in south-central Saskatchewan (Figures 1 and 2). Wettlaufer (1955:40) noted that local amateur archaeologists, such as Mr. A. Hudson, had found pottery in connection with Besant cultural materials in the Mortlach site vicinity though none was recovered during the systematic excavations.

Besant cultural remains have been found in North and South Dakota, Montana, Wyoming, Manitoba, Saskatchewan and Alberta (Peck and Hudecek-Cuffe 2003; Scribe 1997, Vickers 1994). The remains are primarily those of a bison hunting culture adapted to life on the Northern Plains. However, the use of pottery and construction of burial mounds ties those groups responsible for Besant phase sites to Middle Woodland cultures of the Eastern Woodlands (Gregg et al. 1996; Neuman 1975). Further, it is proposed that Besant origins are associated with Early Woodland cultures of the northeastern plains/eastern woodlands (Scribe 1997:161). The widespread occurrence of Besant sites across the Northern Plains suggests that there was strong communication between the Eastern Woodlands, the Middle Missouri River region and the western plains during this time period (Gregg et al. 1996:84).

Besant groups were highly skilled, organized bison hunters that effectively used jumps and pounds to kill numerous animals in a single event. They are described as “without question the most sophisticated pedestrian bison hunters to occupy the Northwestern Plains (Frison et al. 1996:25). Examples of communal pound kills in Saskatchewan include the Fitzgerald site Elnp-8 near Saskatoon (Hjermstad 1996), The Melhagen Site (EgNn-1) near Elbow (Ramsay 1991), and the Walter Felt site EcNm-8 near Mortlach (Kehoe 1974) (Figure 2). Large processing areas associated with the

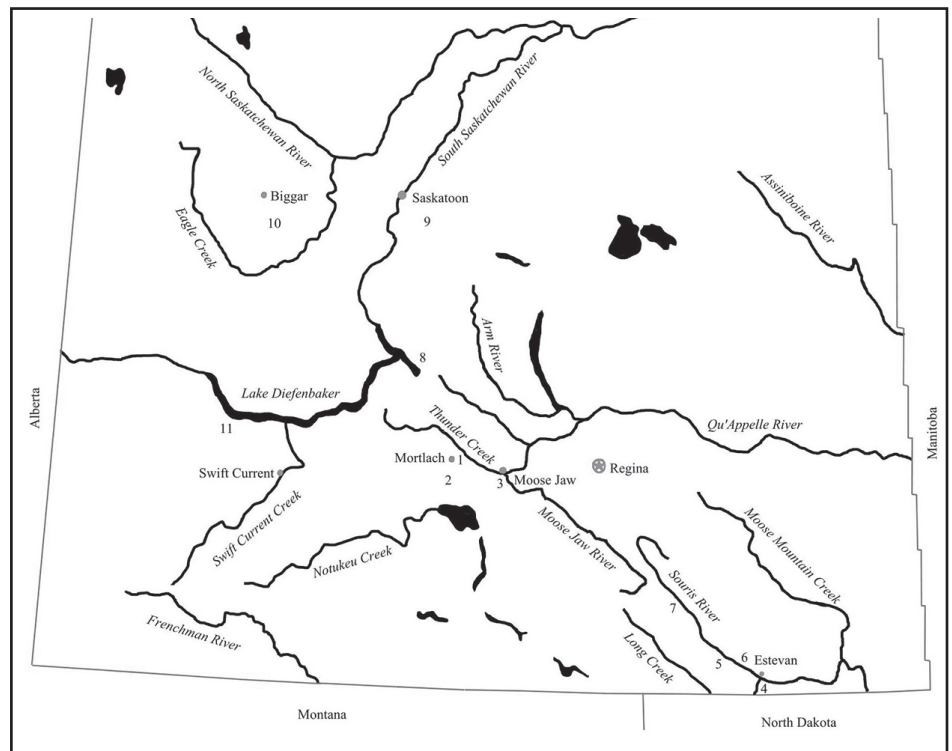


Figure 2: Locations of various Saskatchewan Besant Phase sites or Besant pottery recoveries: 1. Mortlach EcNI-1; 2. Walter Felt EcMn-8; 3. Garratt EcNj-7; 4. Long Creek DgMr-1; 5. Crane DiMv-93; 6. Ratigan DhMs-10; 7. Bennett DjMw-27; 8. Melhagen EgNn-1; 9. Fitzgerald Elnp-8; 10. Biggar Bone site FaNx-3; 11. Antelope Creek EeOc-2.

kills, such as that at the Fitzgerald site (Hjermstad 1996:263) provide evidence for preserving the great volume of food acquired.

In the Missouri River region, Besant phase artifacts are found in elaborate burial mounds with increased amounts of pottery as part of a mortuary complex called Sonota (Neuman 1975:96). The interment of numerous bison elements with the human burials is suggestive that bison ceremonialism was an important aspect of the mound builders' cosmology (Wright 1999: 827-828). Also included in the mounds are artifacts produced from Upper Great Lakes copper, shells from the Illinois and Ohio Rivers and the Gulf of Mexico, and obsidian from the Rocky Mountains. These items indicate that Besant-Sonota peoples were involved in extensive trade networks and belief systems (Gregg et al. 1996:85). These burial mounds do not routinely occur outside the Sonota core area (Gregg et al. 1996:84).

The relationship between Besant and Sonota has been subject to considerable debate and definition since Neuman's (1975) introduction of the Sonota Complex of the Besant Cultural Tradition and is beyond the scope of this paper. The reader is directed to other archaeologists' work for summaries and considerations of this topic (*cf.* Hjermstad

1996:50-55; Peck 2011:282-283; Ramsay 1991:85-93; Scribe 1997:22-46). In general, Sonota is considered as a regional expression or subgroup of the communal hunting-oriented Besant culture, utilizing the same general tool kit as Besant but participating in burial mound practices, increased production/use of pottery, and greater access to and use of Knife River flint from the North Dakota quarries. It has been postulated the infrequently-occurring Besant pottery on the Canadian grasslands could represent vessels acquired through trade or carried-out of the Middle Missouri region rather than vessels produced at camp, kill, or processing sites (Hjermstad 1996:53; Scribe 1997:57; Walde and Meyer 2003:138-139).

Besant-Sonota Pottery

Besant-Sonota pottery producing occupations in Manitoba, Saskatchewan, Alberta and the Dakotas are part of a Middle Woodland complex of the Plains Woodland Tradition (Gregg et. al, 1996:83-85; Scribe 1997:56-59; Walde and Meyer 2003:137) and exhibit a simple vessel form, varying from conoidal to coconut-shaped (slightly expanded mid-section). The exterior surface treatments are of two forms - cord-marked/cord-roughened or smooth/plain (Scribe 1997:60-61, 159; Walde and Meyer 2003:137-138) (Table 1). The parallel cord-marks occur vertically, horizontally and diagonally across the entire exterior of the vessel and, in some instances, extend onto the upper interior wall surface (Gregg 1985:121; Neuman 1975:33; Scribe 1997:60). Criss-crossing or diagonal overlap of the impressions have been observed toward and on the base of vessels.

The most common and, in many cases, the only decorative elements occurring on these vessels are punctates and associated bosses (Dyck 1983:115; Scribe 1997:61-62; Walde and Meyer 2003:138) (Table 2). Punctates may be impressed in a single encircling line on the exterior or interior of the vessel wall within a few centimeters of the lip. In some instances, the punctates and bosses alternate in the encircling line.

Less frequent decorative elements include dentate stamping, incising, fingernail impressions, cord-wrapped tool, incising, or tool impressions been recognized on the lip or lip adjacent portion of pots (Gregg 1985:121; Gregg et al. 1996:85; Neuman 1975:93; Scribe 1997:159-160; Toom 1996). A partially reconstructed vessel with a 30 cm orifice diameter and approximately 33 litre capacity from the Stelzer site (39DW242) along the Missouri River in South Dakota exhibited a band of arched, diagonally-oriented dentate stamps immediately below the single row of exterior punctates (Neuman 1975:15, 151).

Lip profiles may be rounded, rounded and beveled to the

exterior, flat, flat and sloping to the exterior, and flat with overhang or bulge to exterior or exterior and interior (Gregg 1985:121; Dyck 1983:120-121)

In terms of method of manufacture, Besant pottery sherds lack coil breaks (Neuman 1975:93) and it is surmised that vessels were created by lump modelling or by joining flat slabs or 'pancakes' of clay together inside a mould, such as an ash-lined pit, the base of a broken vessel or a hide bag. Once the vessel was built, the potter then compacted the paste using a paddle and anvil to drive out air pockets in the clay. Paddles wrapped with cords produced a distinctive exterior surface treatment, which was then smoothed to varying degrees (Scribe 1997:159-160) (Table 2). The paste of Besant phase pottery is coarse, often dense, and tempered with crushed granite up to 4 mm diameter or sand in moderate to high amounts (Dyck 1983:115; Meyer and Rollans 1990; Neuman 1975:13-16).

Saskatchewan sites that have produced Besant Phase pottery in apparent association with Besant projectile points include Walter Felt (EcMn-8) near Mortlach (Wettlaufer 1955); Garratt (EcNj-7) at Moose Jaw (Morgan 1979); the Estevan-area sites Long Creek (DgMr-1) (Wettlaufer and Mayer-Oakes 1960), Crane (DiMv-93), Bennett (DjMw-27) and Ratigan (DhMs-10) (Meyer and Rollans 1990); Fitzgerald (ElNp-8) near Saskatoon (Hjermstad 1996); Biggar Bone (FaNx-3) near Biggar (Meyer and Rollans 1990); and Antelope Creek (EeOc-2) near Cabri (Novacosky 2003) (Figure 2). However, Besant pottery in these sites does not typically occur in large amounts or represent many vessels. As Scribe (1997:162) notes, the number of "nonceramic Besant-Sonota kill and processing sites far exceeds the pottery-bearing sites of the culture on the Canadian Grasslands". Pottery is a more common recovery from Besant-Sonota sites along the Missouri River valley and drainages in the Dakotas (Fredlund et. al, 1985; Meyer and Rollans 1990:12).

Some of the earliest dates for archaeological components bearing Besant Phase pottery are from sites in the near vicinity of Mortlach (Figure 2). For instance, the deepest pottery-bearing zone from Besant Phase levels at the Walter Felt Site (EcMn-8) south of Mortlach produced an uncalibrated radiocarbon date of 1610 +/- 70 B.P., or a calibrated age of 1525 B.P. (Morlan 1993:64). The oldest date on record for a Besant occupation containing pottery is from the Garratt site (EcNj-7) in the Moose Jaw River valley, approximately 35 km east of Mortlach (Morgan 1979:90). It generated an uncalibrated radiocarbon date of 1990 +/- 75 B.P., or a calibrated date of 1942 B.P. (Morlan 1993:63).

Table 1: Characteristics of Besant-Sonota Pottery (from Gregg 1985; Neufeld 1975; Scribe 1997).

Characteristic	Description	Measurements
Profile	Simple (conoidal/coconut shape) with vertical, slightly in-sloping or slightly excurvate rims	
Exterior Surface	Vertical, horizontal, or diagonal cord-roughened/cord-wrapped paddle impressions smoothed to varying degrees; or, Plain/Smooth surface	
Interior Surface	Plain/Smoothed; horizontal to diagonal cord-wrapped paddle impressions may be present on upper portion of vessel; interior depressions present	
Cord	S-twisted and Z-twisted (clockwise and anti-clockwise)	0.25 to 2 mm
Cord spacing		2 to 5 mm
Method of Manufacture	Lump molding with paddle and anvil consolidation	
Lip	Round; flat/flattened to square; beveled or sloping to exterior (round or flat); flat with overhang or bulge to exterior or exterior and interior	6 to 11 mm
Lip/Lip Edge Decoration	When present: Cord, cord-wrapped tool, smooth tool, or dentate stamps applied transversely or diagonally across lip or on lip edge. Cord-wrapped paddle impressions on the lip may be surface treatment rather than decoration.	
Below-Lip Decoration	When present: Single row of round to tear-drop exterior or interior or alternating punctates with associated bosses; single band of diagonal dentate stamping below punctates; vertical sharp tool impressions; fingernail impressions	
Punctate diameter		3.2 to 16 mm
Punctate distance below lip		10 to 32 mm
Punctate spacing		7 to 25 mm
Below-Lip/Body sherd thickness		4 to 19 mm
Paste	Friable to compact, coarse paste with tendency to fracture raggedly; lamination may be present with tendency to split parallel to wall surfaces.	
Temper	Crushed granitic material (quartz and feldspar) and/or sand; may protrude from interior and/or exterior surfaces	< 0.5 to 4 mm
Colour	Light brownish yellow to orange (oxidized) to grey and black (reduced) surfaces; grey to dark grey (reduced) core	

Mortlach-Area Vessel Description

A total of 79 sherds from the box of pottery labeled as originating north of Mortlach appear to be from a single Middle Woodland Period vessel. This proposition is based on consistency in surface treatment, paste characteristics, and decorative attributes. The 79 sherds include three lip sherds and 76 below-lip sherds, including exfoliation fragments. The sherds are small, all of which measure less than 3 cm².

While portions of the vessel have been reconstructed, they are relatively small and do not produce a lip-to-base profile (Photoplate 1). However, it was possible to determine the potter's method of manufacture, surface treatment, decoration techniques and the vessel's general profile (Figure 3) from these reconstructions as well as other characteristics

from individual sherds. The following is a detailed summary of the vessel including decorative, morphological and paste information. Both qualitative and quantitative data were collected and are presented herein.

A. Lip Zone

The lip of the vessel exhibits a flat and smoothed surface with subangular corners resulting in a predominantly square profile. One lip sherd exhibits a slight concavity on its surface, likely representing pressure from forming and smoothing the lip surface. The thickness of the lip ranges from 6.7 mm to 7.5 mm (Table 2). This is slightly less than the thickness documented for the region immediately below the lip and for the below-lip/body sherds (7.7 to 9.2 mm).

A small portion of the vessel orifice was reconstructed from two of the lip sherds. It was possible to calculate an inner lip diameter of 13 cm from this orifice reconstruction based on the formula:

- $D = a^2 + 4(b^2)/4(b)$ where
 - D = the inner lip diameter,
 - a = the length of the cord marking the width of an arc created by the curvature of the inner lip portion, and
 - b = the maximum perpendicular distance between the cord and the arc.

This diameter calculation must be considered tentative given the small size of the reconstruction.

There are oblique, twisted cord impressions present across the lip surface. These are well smoothed but not obliterated. The cord marks are thin, no greater than 1 mm wide and spaced approximately 2 mm apart. Modelling clay impressions show a 'Z' twist, which would be the twist of the actual cord. These match the impressions found on the vessel body and it appears they were produced with the same cord-wrapped paddle. As such, they are not considered decoration, per se, but a product of the surface treatment process (see below).

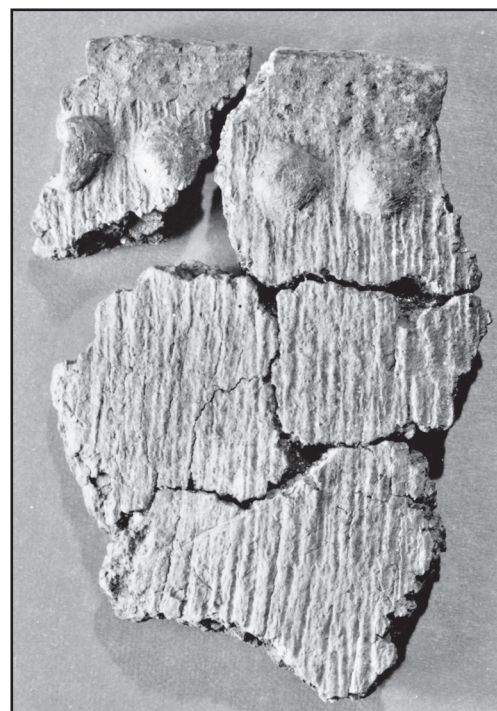


Table 2: Mortlach-Area Besant Vessel Quantifiable Attributes.

Attribute	Minimum	Maximum
Lip thickness	6.7 mm	7.5 mm
Orifice Diameter (calculated)	13 cm	
Punctate diameter	4.2 mm	4.6 mm
Punctate depth	N/A	8.7 mm
Punctate distance below lip (to top edge of punctate)	11.6 mm	15.3 mm
Punctate spacing (between closest edges of punctates)	6.8 mm	9.1 mm
Boss diameter	8.9 mm	10.5 mm
Wall thickness at punctate/boss	8.9 mm	10.2 mm
Cord width	<1 mm	1 mm
Cord spacing (cord-wrapped paddle)	~2 mm	~2 mm
Body sherd thickness	7.7 mm	9.2 mm
Grit temper diameter	0.5 mm	4 mm
Oxidation rim thickness		1.5 mm

B. Vessel Decoration

Decoration on this vessel consists of a single row of interior punctuates resulting in the presence of exterior bosses encircling the upper portion of the pot (Photoplates 1 and 2; Figures 3 and 4; Table 2). This line of decoration is present 11.6 to 15.3 mm below the lip surface, measured to the top edge of the punctates. The interior punctates are round and 4.2



Photoplate 1 (top): Exterior of partially-reconstructed, cord-roughened vessel with boss decoration.

Figure 3 (above): Digital Reconstruction of the Mortlach-Area Besant Phase Vessel.

- 4.6 mm in diameter. They are spaced 6.8 - 9.1 mm apart, with measurements taken between the closest edges of the punctates. The punctates are impressed with a solid tool to a maximum depth of 8.7 mm. There is slight scoring on the punctate interior; it appears the tool was swirled as it was impressed then removed from the clay.

The exterior bosses are prominent and wide, with diameters ranging from 8.9 mm to 10.5 mm. The potter left fingerprints on the bosses by holding a finger against the exterior wall while impressing the tool into the clay from the interior. These are clearly visible in several instances (Photoplate 1). The maximum vessel thickness occurs at the boss/punctate line, ranging from 8.9 to 10.2 mm (Figure 3).

C. Profile

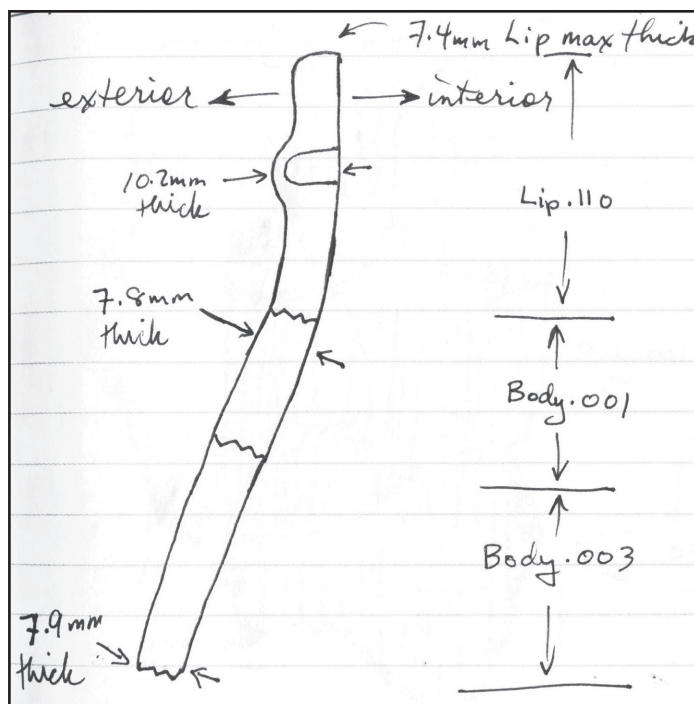
This vessel has a simple, conoidal-coconut shape profile exhibiting slightly expanded midsection (Figures 3 and 4). There are no sherds present that exhibit strong inflections/deflections consistent with defined neck, rim or shoulder zones. In fact, most sherds exhibit straight walls or subtle convex exterior/concave interior surfaces representative of a simple vessel profile. Below the lip, the wall thickness is 7.7 mm to 9.2 mm (Table 2).

At approximately 3.5 - 4 cm below the lip, the vessel profile exhibits a subtle concave curvature providing a vertical to marginally excurvate orifice (Figure 4). The wall at the approximate inflection measures 7.8 mm thick. This subtle concave curvature then gently reverses itself leading into the subtle convex curvature of the coconut-shaped body.



Photoplate 2 (above): Interior surface of partial vessel reconstruction.

Figure 4 (below): Profile of partial vessel reconstruction.



vessel surface exhibits parallel cord impressions, some of which overlap or converge on one another, indicating a paddle was used to beat the surface. In addition, there are no coil breaks present, supporting the interpretation that coiling was not used as a method of manufacture.

The point of maximum vessel diameter is at least 8 to 9 cm below the lip (the lowest portion of the vessel reconstruction), with the sherds at this point achieving a maximum thickness of 7.9- 8.0 mm.

Some of the thicker sherds exhibit slightly stronger exterior convex/interior concave curvatures suggestive of a rounded/sub-round basal area. Some of these same sherds also have differently-angled, overlapping cord-wrapped paddle impressions typical of basal sherds.

D. Method Of Manufacture

This vessel has been produced by either building the vessel walls up from a large lump of clay and/or by pressing pancakes of clay together to form the general shape of the pot, possibly inside a mold to prevent the vessel walls

from collapsing. Once created, the vessel walls were consolidated by the paddle-and-anvil method. A paddle, such as a flat piece of bone or wood, was struck against the exterior surface of the vessel wall while the potter held an anvil, such as a smooth stone, on the inside of the vessel wall. This consolidated the paste of the vessel, driving out air pockets while making the wall thickness more uniform.

The evidence of this manufacture technique is seen in the shallow depressions on the interior vessel wall, representing the places where the potter held the anvil. The entire exterior

E. Exterior Surface Treatment

The vessel exterior and lip surface exhibit vertical cord-wrapped paddle impressions (Photoplates 1 and 3; Figure 3). In addition, grit temper shows through the exterior surface of the vessel.

The 'Z' twist cords are no greater than 1 mm in diameter and spaced approximately 2 mm apart on the paddle (Table 2). The impressions are parallel on the upper portion of the vessel and tightly packed, indicating repeated but precise paddling. The impressions tend to converge or cross diagonally on sherds interpreted to be from the basal area of the pot. Had the vessel been constructed in a textile bag and struck with a plain paddle, or struck with a textile-wrapped paddle, the impressions on the exterior surface would show cords crossing over and under one another, or even knotting. However, this is not the case.

Smoothing of the impressions is light to moderate on the majority of the sherds, with none exhibiting completely smooth exterior surfaces. However, horizontal smoothing of the cord impressions immediately below the lip and above the line of boss decoration has effectively obliterated the cord marks within the top 1 cm of the vessel (Photoplate 1). This smoothing is very deliberate and different from that on the remainder of the vessel exterior.

F. Interior Surface Treatment

The upper 5 to 6 cm of the interior surface of the vessel exhibits subtle horizontal to slightly oblique cord-wrapped paddle impressions (Photoplate 2; Figure 5). The impressions are sparse and not deeply impressed, and have been well smoothed. Unlike the exterior surface, where the paddle was applied repeatedly to consolidate the paste as evidenced by the tight spacing of cord impressions, the application of the cordwrapped paddle to the interior was much more limited, likely due to the (apparently) small orifice diameter.

Overall, the interior is well smoothed with light wiping striae present. A considerable amount of grit temper shows through the interior wall surface and is exposed to the point of being noticeably palpable. Numerous sherds have shallow depressions on the interior surface suggesting the use of an anvil during the paddling of the exterior surface. It appears that there is a minor amount of carbon residue on the interior; however, this is patchy and thin and most likely represents a vessel that was not a heavily used cooking pot.

G. Paste

The paste of the vessel is quite dense and homogenous. It exhibits a low porosity to the naked eye and low-power magnification. The sherds exhibit jagged fractures, which is indicative of blocky paste, though some sherds are friable.



Photoplate 3: Sherd exhibiting exterior surface cord-wrapped paddle impressions.

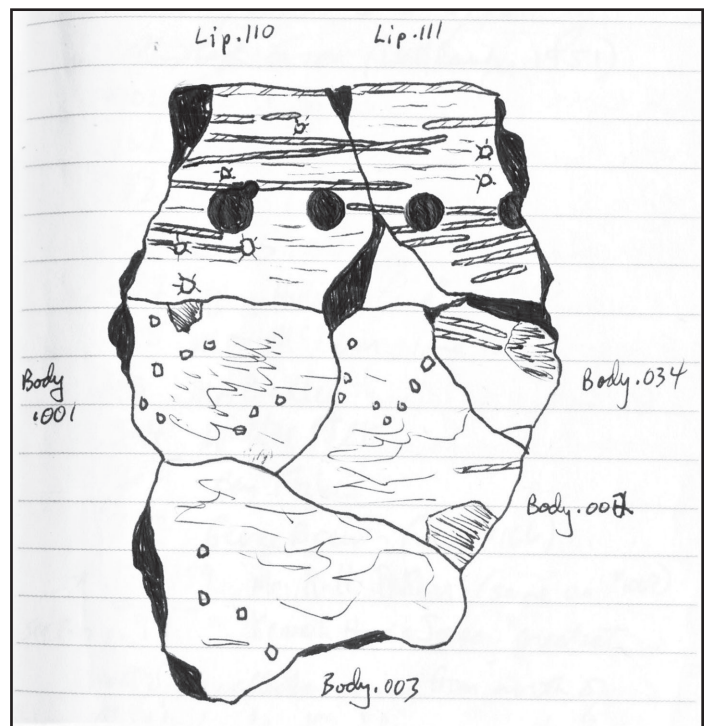


Figure 5: Interior surface of partial vessel reconstruction.

The exterior surface tends to exhibit an oxidation rim that is up to 4.5 mm thick, often at least half as thick as the vessel walls. The interior and exterior surface colouration ranges from a light yellow-brown or light grey-brown to dark grey; colouration is not consistent on either surface.

While several sherds have a noticeable lamination parallel to the wall surfaces, there are relatively few large exfoliations

present in the collection. It does not appear that portions of the wall surface split or exfoliated during firing, as there is no oxidation on the exfoliated interior surfaces. In fact, all the pottery sherd cores are reduced and no sherds exhibit oxidation across the fracture surfaces. These attributes are taken as evidence that the pot survived the firing process.

Grit temper is composed of subangular to subrounded quartz and feldspar particles. These particles are present in moderate amounts. They are typically 0.5 to 2.0 mm in size with some pieces exhibiting a maximum diameter of 4 mm.

Comparisons

The vessel recovered from the Mortlach area described above exhibits many of the attributes and dimensions documented for Besant-Sonota pottery in the Dakotas and Canadian grasslands (Table 3). These include: a simple profile with a slightly expanded midsection (conoidal-coconut shape), cord-wrapped paddle surface treatment (interior and exterior), interior anvil impressions, quartz and feldspar temper, temper protruding from the interior and/or exterior wall surfaces, a smoothed and flat(tened) lip with diagonal cord-wrapped paddle impressions across the surface, a single line of interior punctate/exterior boss decoration encircling the vessel rim, and grit temper in coarse and generally dense paste.

The size of the punctates on the Mortlach-area vessel falls below the diameter recorded for most Besant Phase pottery (Table 3). However, a single Besant vessel documented in the Antelope Creek site collection (EeOc-2) at the South Saskatchewan River north of Cabri exhibited a 3.2 mm punctate diameter (Novecosky 2003:54, 174). In addition, the punctates of both vessels were deeply impressed – 7.9 mm deep in walls approximately 8.6 mm thick for the Antelope Creek vessel and 8.7 mm

deep in walls that were approximately 8 mm thick for the Mortlach-area vessel. Neuman (1975:93) notes that, for the Sonota pottery recovered in the Dakotas, interior punctates were found only on vessels with smoothed exterior surfaces. However, one vessel from the Walter Felt site near Mortlach exhibits a row of exterior bosses produced by round, interior punctates and a prominent cord-roughened exterior (Meyer and Rollans 1990:9). The Besant vessel from the Antelope Creek site also exhibits exterior boss – interior punctate decoration on the rim with exterior vertical cord roughening that extends onto the flat lip surface (Novecosky 2003:54, 174-175). In addition, exterior boss with interior punctate decoration was documented for Besant pottery at the High Butte site 32ME13 in the Missouri River Valley of North Dakota (Gregg 1985:121). While infrequent, it is apparent that this motif or type is present across a relatively wide region. This vessel, then, is considered a match with previously described, cord-roughened pottery recovered from Besant-Sonota occupations or collections that produced diagnostic projectile points and which, in some cases, have been radiometrically dated. However, caution must always be exercised in assigning an archaeological affiliation to a box of sherds when their provenience and association with other artifacts could not be confirmed.

Table 3: Besant Phase and Mortlach-Area Vessel Quantitative Comparison.

Attribute	Besant Phase Range	Mortlach-Area Vessel
Lip thickness	6 to 11 mm	6.7 to 7.5 mm
Punctate diameter	3.2 to 16 mm	4.2 to 4.6 mm
Punctate distance below lip	10 to 32 mm	11.6 to 15.3 mm
Punctate spacing	7 to 25 mm	6.8 to 9.1 mm
Cord width	0.25 to 2 mm	<1 mm
Cord spacing on paddle	2 to 5 mm	~2 mm
Body sherd thickness	4 to 19 mm	7.7 to 9.2 mm (8.9 to 10.2 mm at boss line)
Grit temper diameter	< 0.5 to 4 mm	0.5 to 4 mm

Conclusion

In an overview of Saskatchewan sites that produced Besant pottery, Meyer and Rollans (1990) noted that most excavations produced only one or two vessels. However, they also indicated that:

...[f]or southern and central Saskatchewan, it is apparent that Besant pottery has simply not been recognized or, even when present, explained away. For Saskatchewan, it seems that an intensive search of records, or of collections, could lead to the identification of many more Besant components with pottery.

Examination of the Antelope Creek site pottery collection and the Mortlach-area collection housed at the Moose Jaw Museum and Art Gallery has contributed to this goal, albeit one vessel at a time. It is hoped that, through dissemination of the detailed description of this Besant Phase

vessel, such pottery will be recognized and documented more regularly in systematically-recovered archaeological assemblages as well as in collections housed in Saskatchewan repositories or held privately.

While it is possible that the infrequently-occurring Besant pottery typically found in low amounts in Saskatchewan (and Canadian) sites represents out-movement of vessels from the Middle Missouri region rather than *in situ* production, the ever-widening area and increasing number of instances in which it is recovered may support Meyer and Rollans' (1990) assertion that, in fact, pottery was an integral part of Besant material culture in Saskatchewan.

Acknowledgements

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My appreciation also goes out to my brother, Jason G. Paquin, for the three-dimensional digital vessel reconstructions. His attention to detail and computer skills have greatly improved my means to illustrate this vessel.

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