

A Guide to Saskatchewan Archaeology



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Abbreviations

BP - Before Present: Used with dates that have been dated using the radiocarbon dating method; scientists have set 1950 as the arbitrary start date.

A Guide to Saskatchewan Archaeology

1.0 Introduction

Saskatchewan has a rich and long history dating as far back as 10,000 – 12,000 years. Consequently, many remnants of this history are visible throughout the province. The purpose of this handbook is to provide those not previously acquainted with this rich and extensive history and heritage, as it is interpreted by the discipline of archaeology, with a brief and convenient introduction to archaeology in Saskatchewan.

Any curious person who has encountered rings of stone on unbroken prairie or found a hammerstone in a cultivated field has likely wondered, "Who made these things? Why? How? How long has it been since they were used by people?" Such basic human questions are what motivate archaeologists to consider what human life in the past might have been like. The endeavour to answer such questions responsibly constitutes the practice of archaeology.

By carefully and scientifically studying evidence in the soil of past human activities, archaeologists are able to reconstruct past human lifeways. By tradition, there are two broad categories of archaeology: historic or contact and prehistoric or precontact (*hereinafter referred to as "historic" and "precontact"*). Historic archaeology deals with sites and artefacts after the start of European exploration, when written records existed, while precontact archaeology is the term used to refer to times previous to approximately 1690 A.D. These terms have been adopted because not all history is written, and it recognizes the impact European contact has had on the indigenous populations of North America.

Archaeologists undertake several scientific practices to investigate how people lived in the past. By studying the material remains or "artefacts" left behind by past groups, archaeologists attempt to reconstruct past lifeways and behaviours. Two important research activities associated with archaeology are excavations and surface surveys.

At a "*dig*" or *excavation*, archaeologists control the unearthing of areas occupied or modified by earlier human activity. Scientific examination of artefacts and other remains of human activity within a buried context can explain the kinds of activities people engaged in during their daily existence. The study of fossilized pollen grains and other deposits in soils containing artefacts helps archaeologists reconstruct earlier ecological environments.

Surveys of land surfaces containing archaeological materials are important methods of obtaining information about where people chose to live. For instance, surface surveys, which have mapped many different tipi ring encampment sites from different geographic regions, can be compared, and settlement patterns can be suggested. The same can be said of homestead surveys. Occasionally, surveys identify areas that are intrinsically significant, such as boulder configurations (effigies, medicine wheels, etc.), rock art, and vision quest sites.

2.0 Archaeological Sites

A site can be understood as any place where human activity occurred sometime in the past, and for which there is evidence of that activity. A site is categorized and interpreted according to several criteria: its geographic location, the artefacts and features it contains, the space and time relationships among the artefacts and features, its age, and the purpose for which the site was used. There are various kinds of sites: habitation, kill, quarry, burials, rock art, boulder configurations, trade centres, agricultural, transportation, fortification, and more. Although most sites are recognized when artefacts or features are discovered, not all sites contain direct evidence of human presence. Areas that figure prominently in events related through oral traditions or through written documentation are occasionally considered to be sites. There are many different types of archaeological sites that can be found in the province of Saskatchewan and across the Prairies.

2.1 Campsites/Habitation Sites

Prevalent throughout Saskatchewan, campsites or habitation sites are the remnants of daily living by First Nations groups in the past. They often included activity areas as seen through concentrations of artefacts such as lithic (stone tool) scatters, bone debris, and ceramics/pottery as well as through the presence of tipi rings – a circle of stones that would have held down the hide covering of a tipi. Features associated with campsites often include hearths.

2.2 Kill Sites

Kill sites are the locations where hunters have killed one or more animal(s) in the past. The most well known example of a kill site on the Plains is a bison jump. Past hunters took advantage of topographical features such as cliffs, ravines, coulees, and sand dunes to stampede and kill bison. Kill sites can vary in size from only a few animals to hundreds. They are marked by the presence of large quantities of animal bones. In some cases, kill sites were used repeatedly for hundreds of years, as can be seen in the accumulation of multiple layers of animal remains over time. While bison remains are the most prevalent in Saskatchewan archaeological sites, they are not the only animal remains to be found. Past hunters also made use of solitary animals such as elk and moose, as well as deer, pronghorn, waterfowl, fish, etc.

2.3 Processing Sites

Processing sites are often found nearby or in association with kill sites. This is an area where animal remains were processed or butchered. Primary processing sites are where initial butchering and dismemberment takes place while secondary processing sites demonstrate further butchering and hide preparation. Cultural material recovered from processing sites involve large quantities of broken bones, often displaying cutmarks where meat was cut away

from the bone, as well as stone tool debris such as broken projectile points, scrapers, knives, stone hammers, etc.

2.4 Ceremonial Sites

Ceremonial sites are a rarer type of archaeological site found in Saskatchewan. Due to their unique function, they tend to be limited to particular topographical areas. Often associated with spiritual aspects of past groups, they are considered Sites of Special Nature by the Provincial Government and are given additional protection from destruction. The most common ceremonial site types in Saskatchewan can be divided into four main groups:

2.4.1 Pictographs

Pictographs are a form of rock art wherein pictures and symbols have been painted onto a rock face (Figure 1). Typically this type of rock art is found on sheer rock faces along river courses in northern Saskatchewan such as the Churchill River. Pictures depicted include thunderbirds, tally marks, hunting scenes, animals, and occasionally human figures. Meaning ascribed to such artwork has ranged from the spiritual (associated with offerings, hunting magic, and vision quests) to more secular explanations of territorial or boundary markers as well as communication between individuals or groups.



Figure 1: Churchill River Area Pictograph (Jones 1981:21)

2.4.2 Petroglyphs

Petroglyphs are another form of rock art. In this type, pictures and symbols have been pecked or grooved into a rock face (Figure 2). This style of art is more commonly found in southern Saskatchewan especially on cliff faces (St. Victor's Petroglyphs) and large glacial erratics (Herschel). Similar pictures are found in petroglyph sites as are found in pictographs sites such as animals, tally marks, etc. as well as additional images such as hoof prints, claw prints, and,

more rarely, detailed human figures. Again, attributing meaning to rock art can be very difficult and can range from religious to secular explanations.



Figure 2: Petroglyph from Herschel, Saskatchewan

2.4.3 Medicine Wheels

Both medicine wheels and effigies are often labeled as boulder monuments in Saskatchewan archaeology. Medicine wheels are a large grouping on stones arranged in a circular pattern. Occasionally they can include a large central pile of rocks (cairn) or even radiating lines of stones (spokes). They tend to be much larger in diameter (>10 metres) than tipi rings. Again, medicine wheels appear sporadically across central and southern Saskatchewan. The true function of medicine wheels is currently unknown although they have been thought of as burial monuments, location or event markers, or even astronomical alignments.

2.4.4 Effigies

Effigies are formed by the careful placement of stones in an outline of an animal, human, or geometric shape (Figure 3). Again, they tend to be quite large (>10 metres) and are not a very common type of archaeological site in Saskatchewan. Due to their rarity, the Provincial Government also protects them along with rock art and medicine wheels under special legislation. Common animals depicted include bison (Big Beaver), turtles (Minton), and snakes, as well as human figures (Cabri Lake).

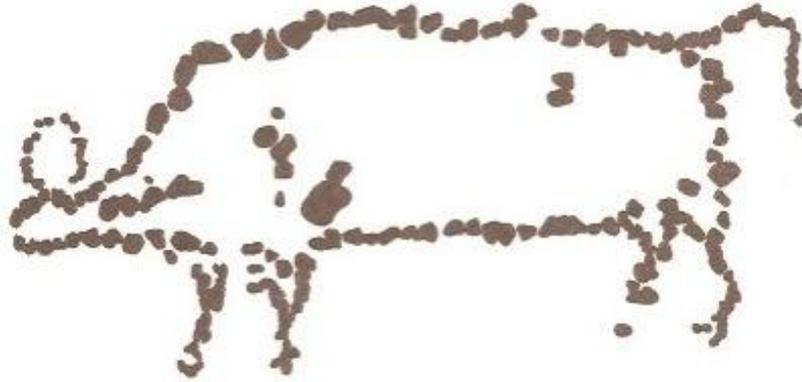


Figure 3: Big Beaver Bison Effigy (Brace 2005:60)

2.5 Cairns

Often considered another form of boulder monuments, cairns may or may not have ceremonial significance. Cairns are large piles of stones (approximately a metre or more in diameter) that can be found on their own or in association with other cairns, a medicine wheel, or an effigy. When found with medicine wheels or effigies they are thought to be of ceremonial significance; however, when found on their own or in association with other cairns their function becomes harder to determine. In some cases, they can be cache locations for tools or food or even boundary or geographical markers on the landscape. In some instances they may be animal drive lines.

2.6 Lithic Quarries

Formal stone quarrying locations are unknown in Saskatchewan. However, there are locations where stone was removed for tool production on a regular basis. Within the glacial gravels found throughout the province, there are stones that could be used to make tools. Past groups had an in-depth knowledge of their surrounding environment and were aware of what types of rock was best for particular tools. As such, groups did also travel to certain locations to obtain stone for tool production such as quartz from northern Saskatchewan, Swan River chert from glacial gravels and Rocky Mountain quartzite from glacial meltwater channels found in southwestern Saskatchewan. Certain areas of the province provide outcrops or erosional exposures of particular rock types that would have been gathered on a regular basis. Other types of stone used in the production of stone tools could also be traded in from out-of-province locations. Perhaps the best-known example of a traded-in stone is Knife River Flint from quarries in North Dakota.

2.7 Burials

Burial practices appear to have changed through time and differed depending on the cultural group they are associated with. A number of different burial types have been identified through the archaeological record. Most common is the use of scaffold burials amongst past groups. The deceased would have been placed upon a platform and raised off the ground. Exposure to the elements would have sped up the process of decay. In some cases, the remaining bones would be gathered together and buried, called a secondary bundle burial. Inhumation of human remains (primary burial) below ground has also been archaeologically discovered in the province. This can vary from a single individual interment to multiple individual internments. Past burials can tend to be found on high points of land and more rarely in mounds. Burial mounds have only been found in the southeastern portion of the province. In some cases, grave goods are present within burials. Due to their sensitive nature, exhumation of human burials is a criminal offence without a valid permit issued by the Ministry of Parks, Culture and Sport.

2.8 Rubbing Stones

While not technically considered an archaeological site, rubbing stones are found throughout the province wherever glacial erratics are located. These large stones are often surrounded by a deeply grooved area of ground where past bison herds (and even modern cattle!) have stopped to scratch and rub their winter coats off. Repeated use of these stones has caused the ground around it to be eroded resulting in a deep groove surrounding the base of the stone. In some cases, rubbing stones also display pictographs or petroglyphs.

2.9 Fur Trade Posts

Archaeological sites do not solely include areas used by past groups prior to European contact. Our historic ancestors have also left their imprint on the past. Fur Trade Posts were a common feature in Saskatchewan during the Historic Period (see Russell and Meyer 1999:34-35 for a detailed map of fur trade posts in the province). The fur trade was established prior to fur trade posts appearing in Saskatchewan, requiring First Nations groups to travel as far as Hudson's Bay to trade. The first identified fur trade post in Saskatchewan, Fort St. Louis I, was built on the Saskatchewan River east of Prince Albert in 1753 by St. Luc de la Corne, a French trader (Smythe 1968:168). After this point, numerous other forts were built throughout the province by various companies including the Hudson's Bay Company (HBC), the Northwest Company (NWC) and the New Northwest Company (XY). Fur trade posts were establishments set up to engage in trade with First Nations groups. They were typically comprised of at least a trade house and residence for the European traders; however, depending on the post's function (provisioning post, wintering site, trade post, district post) and occupation duration, these sites could also include large warehouses, winter stores, ice houses, palisades/stockade walls and bastions. Typical artefacts found within fur trade posts can include European as well

as First Nations goods. An assemblage could include ceramics, buttons, trade beads, nails, tin cans, metal objects, personal items, pipe stems, gun flints, etc.

Battlefields are often associated with nearby fur trade posts due to conflicts between First Nations groups and Europeans as well as between competing European companies. The best well-known examples of battlefields in Saskatchewan date to the 1885 Riel Resistance and include sites such as Fish Creek, Batoche, Frenchman Butte, and Cut Knife. Features found at battlefields can include rifle pits, the zareba at Batoche, and earthen berms.

2.10 Métis Wintering/Hivernant Camps

Métis wintering camps are habitation sites at which groups of Métis hunters wintered after the summer bison hunt. These camps would include a concentration of log cabins with fieldstone chimneys. Typical artefacts include collections of European goods such as ceramics, trade goods, firearms, etc. dating to the Historic Period. Petite Ville is an example of a Métis wintering camp in Saskatchewan.

2.11 Homesteads

Homesteads are a later type of archaeological site in Saskatchewan dating to the more recent past. Homesteads were built and occupied by European settlers during the 19th and 20th centuries. They are found throughout the province and in various states of decay from foundation remnants to intact house and outbuilding structures. Their prevalence as well as artefact assemblages that can be dated to a more recent time period can readily identify them.

3.0 Features

Within archaeological sites, one can find artefacts and features. Features are areas of use such as hearths (Figure 4), postholes, stone flaking stations, stone rings, boiling pits, and storage pits, etc. They provide information on determining what the function of an archaeological site was (i.e. a campsite, a cemetery, etc.). However, they are localized to specific areas and may be confined only to certain types of sites. Unlike artefacts, such as projectile points (arrowheads), which can be removed intact from a site, features depend entirely on their position within the site for their identity. Features are therefore often understood as non-portable artefacts. They must be carefully recorded because once they are excavated they are destroyed.

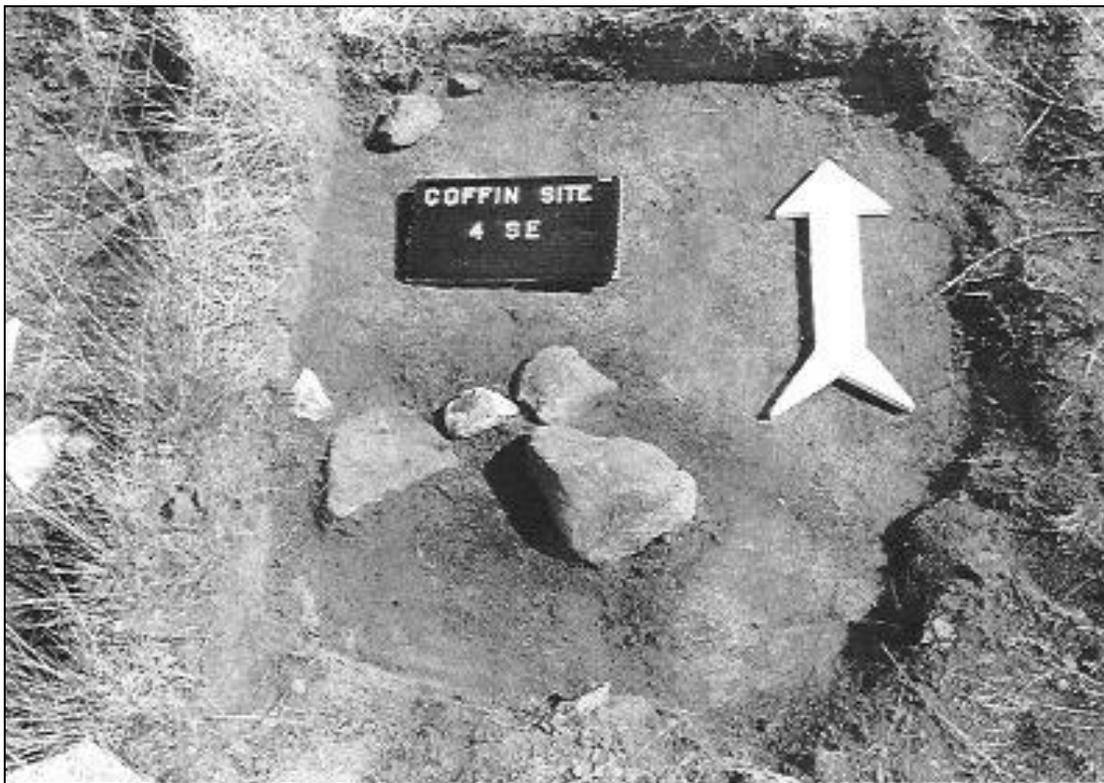


Figure 4: Hearth Feature (Linnaeae 1995:33)

4.0 Cultural Chronology of Saskatchewan History

The cultural history of Saskatchewan can be divided into five distinct periods: the Early Precontact (Palaeoindian) Period, the Middle Precontact Period, the Late Precontact Period, the Protocontact/Contact Period and the Historic Period (Table 1).

4.1 The Early Precontact (Palaeoindian) Period

The earliest period in Saskatchewan and North American history is known as the Early Precontact or Palaeoindian Period and dates between approximately 12,000 and 7,500 years before present (BP). This period marks the arrival of humans in North America and their adaptations to a new environment. Due to the Laurentide glaciation, portions of the province, mainly the northern half, were still covered by glacial ice at the start of this period. However, over the course of thousands of years more and more glacial ice retreated allowing animal herds, along with their human predators, to scatter across the province. Major cultural groups during the Palaeoindian period include Clovis, Folsom, Agate Basin, Hell Gap, Cody Complex, Angostura and Northern Plano. These groups are considered to large game hunters preying on species such as mammoth and ancestral bison through the use of spears. Archaeologically, there is very little evidence for these groups other than the remnants of the stone tools that they created and used. Saskatchewan was likely only sporadically occupied during this period due to the

Years (B.P)	Mulloy 1958		Frison 1978		Walker 1992		Kennedy 2012	
200	Historic		Historic		Historic		Historic	
300	Late Prehistoric		Late Prehistoric		Late Prehistoric		Contact	
2,000							Late Precontact	
3,000	Middle	Late	Plains Archaic	Late	Middle Prehistoric	Late	Middle Precontact	Late
5,000	Prehistoric	Middle		Middle		Middle		Middle
7,500	Hiatus			Early		Early		Early
12,000	Early Prehistoric		Palaeo-Indian		Palaeo-Indian		Early Precontact (Paleo-Indian)	

Table 1: Cultural Chronology of the Northern Plains

(Modified from Walker 1992:12)

environmental conditions created by nearby glaciers. The end of this period saw the extinction of big-game animals such as Ice Age megafauna. In northern Saskatchewan, at the end of the Palaeoindian Period, cultural groups appear with similarities to groups in Nunavut, northern Manitoba and the eastern MacKenzie District (Meyer 1999:24).

4.2 The Middle Precontact Period

The Middle Precontact Period can be subdivided into three smaller periods named Early, Middle, and Late. This period dates from approximately 7,500 years BP until 2,000 years BP. Changing environmental conditions contributed to human groups exploiting a wider variety of different flora and fauna species in addition to bison remaining a dominant food source. The climate went through a period in which it was warmer and drier in some areas of the Plains, causing an expansion of grasslands into central and northern Saskatchewan. This climatic shift is commonly referred to as the *Altithermal* or *Mid-Climatic Optimum*. The archaeology of this period in Saskatchewan reflects adaptation to changing climate as well as cultural differentiation and population increases (Walker 1999:25). The Middle Precontact period sees the use of boiling pits, bison jumps, increasing trade, and the construction of the earliest medicine wheels as well as the widespread use of *atlatl* or spearthrowing technology. A number of different cultural groups inhabited Saskatchewan during this period including Mummy Cave, Oxbow, McKean Complex, and Pelican Lake. It is during the Middle Precontact Period, that more intact archaeological sites appear rather than the scattered isolated projectile point finds typical of the Palaeoindian Period. Archaeological cultures of northern Saskatchewan have more in common with northern Arctic groups during the latter half of this period than with the southern Plains bison hunters. Stone tools reminiscent of Arctic Small Tool tradition (ASTt) groups have been found at sites on Lake Athabasca, Black Lake, and Reindeer Lake (Meyer 1999:24). The Arctic Small Tool tradition is typically found across the Canadian Arctic, Alaska, and Greenland.

4.3 The Late Precontact Period

The Late Precontact Period is the last period before European contact occurs on the Plains. It is dated to approximately 2,000 to 300 years BP and seems to coincide with some distinct changes in human lifeways. This Period is marked by the appearance of pottery and the widespread use of bow and arrow technology. Environmentally, the climate was similar to modern temperatures. Bison jumps are still in use during this period; however, past groups also made use of pound structures (wooden structures or parabolic sand dunes) to hunt bison. Trade networks increase during the Late Precontact Period as does population size and movements. Many of the boulder monuments in Saskatchewan (i.e. Moose Mountain Medicine Wheel, Minton Turtle, and Cabri Lake Effigy) date to this period as well. Cultural groups belonging to this period include Besant, Avonlea, Prairie Side-Notched, and Plains Side-Notched. In northern Saskatchewan (Churchill River Basin), at the beginning of the Late Precontact Period, Meyer (1999:23, 24) reports the presence of a group with similar lifeways to

the Talttheilei Tradition, another Arctic cultural group characterized by the presence of the *chithos*, a hide-working tool (Figure 5). Many different groups were present in northern Saskatchewan as evidenced by the archaeological remains of a number of different pottery styles.

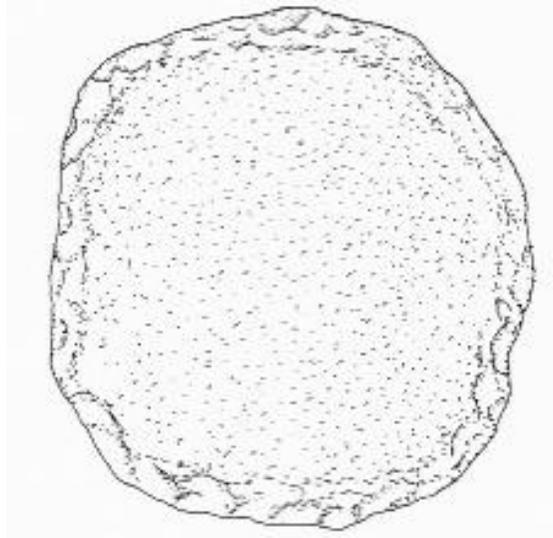


Figure 5: Chithos (Wilson 1983:29)

4.4 The Protocontact/Contact Period

The Protocontact Period, hereinafter referred to as the Contact Period was a brief interval of time, from 300 years BP until 200 years BP, at the end of the Precontact period before Europeans arrived on the Plains. It is during this period that European goods (i.e. metal objects, ceramics, etc.) begin to appear in Plains archaeological sites along with aboriginal artefacts. However, these goods appear due to trade and not actual European contact on the Plains. Likely, Plains cultural groups traded with groups further to the East who were in contact with Europeans or would travel east via their participation in the fur trade to acquire European materials.

4.5 The Historic Period

The Historic Period marks the arrival of Europeans onto the Plains and into Saskatchewan. Initially, Plains groups would make the journey east to Hudson's Bay to trade furs for European goods, making European journeys into the west unnecessary. However, eventually European explorers began to travel further inland to encourage Plains groups to take part in the fur trade. The first of these was Henry Kelsey, a Hudson's Bay Company employee, who travelled into Saskatchewan in 1691 and was the first to describe the lifeways of Plains groups. The establishment of fur trade posts west of York Factory on Hudson's Bay encouraged Europeans

to journey further inland. The second historical account of Saskatchewan cultural groups comes from Anthony Henday's expedition in 1754-1755 through Manitoba and Saskatchewan and into Alberta. The first identified fur trade post in Saskatchewan was established at Fort St. Louis I on the Saskatchewan River in 1753. After 1775, fur traders established a large number of competing posts along most of the major river systems in the province. Along with the establishments of these posts came the need for surveyors such as Peter Pond, Peter Fidler, and David Thompson as well as additional expeditions by explorers such as Henry Youle Hind, the Earl of Southesk, John Franklin, and John Palliser to create maps of areas throughout the province. The arrival of Europeans allowed for the influx of European goods as well as European ideals, language, and customs to affect traditional lifeways. Some Plains groups were able to incorporate European lifeways into their own while others did not. It is during this period that the Métis culture was created as well. Over time, establishment of European settlement in Saskatchewan led to the appearance of Protestant and Roman Catholic Missions, scientific expeditions (e.g. Joseph Burr Tyrrell of the Geological Survey of Canada), creation of treaties between First Nations and the Crown, the North West Mounted Police, the railway, the establishment of Dominion Lands, ethnic bloc settlements throughout the province (e.g. Doukhobour, Mennonite, French, Finnish, etc.), agriculture, and ranching to name but a few.

5.0 Common Artefact Types Found in Saskatchewan

Artefacts are any portable objects that have been modified, shaped, or moved by human action. For purposes of resource management and interpretation, artefacts are classified according to their function. Some types of artefacts that are unique to specific places and/or times are said to be *diagnostic*. In excavations in Saskatchewan, especially of ancient Pre-European Contact sites, only items of more durable materials such as bone, stone, or pottery are preserved from corrosive natural processes. The following are examples of common artefact types.

5.1 Precontact Artefacts

Precontact artefacts are those objects that are found in Saskatchewan archaeological sites prior to European contact. Typically, all are made out of natural materials found locally within the province, although some materials may have been traded through contact with other groups in North America. The majority of these tools, excluding projectile points, have not undergone much if any visible changes in form or function through Saskatchewan history. As such, they tend to be found throughout the Precontact period and well into the Historic Period in many archaeological sites and cannot be used to determine any form of date or cultural affiliation.

5.1.1 Percussion and Grinding Tools

Hammerstones, stone mauls, or grooved mauls (Figure 6) were used for everything from pounding stakes to quarrying stone. Many of the larger mauls are grooved to facilitate hafting. Hafting involves attaching the stone onto a handle through the use of the groove; strips made out of leather or muscle as well as a binding agent help “glue” the constituent parts together. Smaller pecking stones are un-grooved, but can be identified by the impact scars – areas where rock has broken off due to impact, usually found at either end. These smaller pecking stones were often used in the chipping of stone tools, a process called flintknapping. Bell-shaped grinding stones or pestles were used for pounding and grinding everything from dried meat and chokecherries for pemmican, to earth paints for adornment.

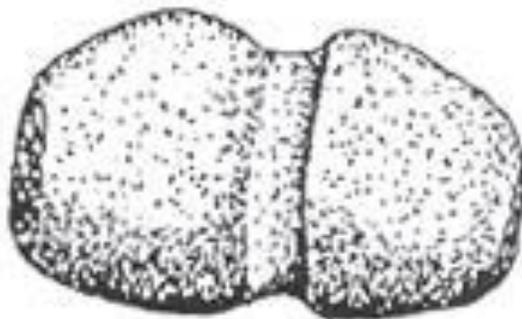


Figure 6: Grooved Maul

5.1.2 Axes and Adzes

Axes (Figure 7) are chopping tools. The presence of blunt ones in Saskatchewan archaeological sites may indicate that they were used as mattocks as well. Adzes or celts are believed to have been used as shaving tools on wood (adzing). Both likely would have been attached or hafted onto wooden or bone handles and both may or may not be grooved. Axes and adzes are produced through grinding, abrading, and polishing. Another stone would have been used to remove (through abrading and grinding) portions of stone until the desired shape was reached. The nearly complete tool would be polished using a fine abrasive material (i.e. sand or silt) in order to smooth the surface of the tool. Polishing is thought to aid in hafting the tool to a handle and/or allow for deeper penetration of the cutting edge of the tool into material such as wood (Kooyman 2000).



Figure 7: Stone Axe

5.1.3 Cores, Flakes, and Debitage

Cores (Figure 8) are the intact or partially intact parent stone from which stone tools can be made. Cores come in a variety of shapes and sizes and can be found in various stages of use from only having a few flakes removed to a discarded and exhausted core from which no more tools may be formed. Small blades produced from a type of core, known as a microblade core, have been found in archaeological sites on the Plains. A core is not considered a tool unless it has also been used as a hammer. From cores, stone chips are detached in order to shape the stone into a tool form. This can be done through a number of flake removal techniques such as hard hammer percussion (stone on stone), soft hammer percussion (a softer material such as bone or antler impacting the core to remove flakes), and bipolar percussion (removing stone through the use of an anvil). Some pieces of chipped stone that are removed from the core are referred to as flakes based on a number of attributes present on them (Figure 9). Stone chips that do not display flake attributes are referred to as shatter or debitage (waste material). Flakes removed from a core can be further shaped or used as expedient cutting tools.

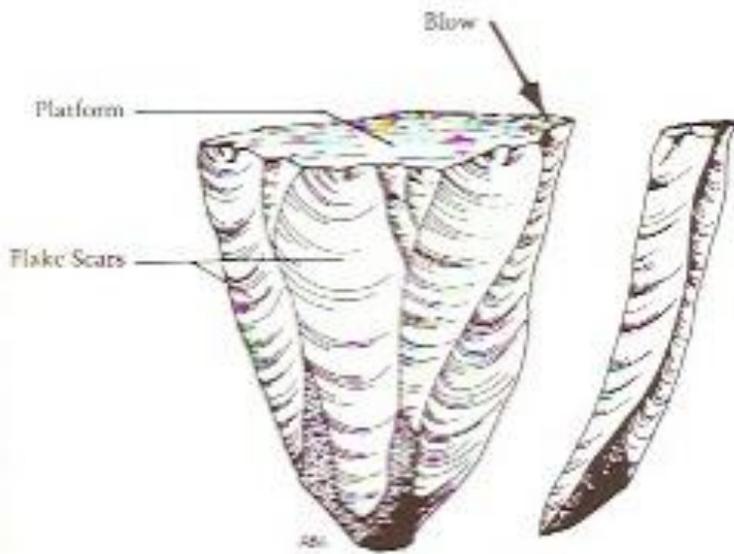


Figure 8: Core (Whittaker 1994:15)

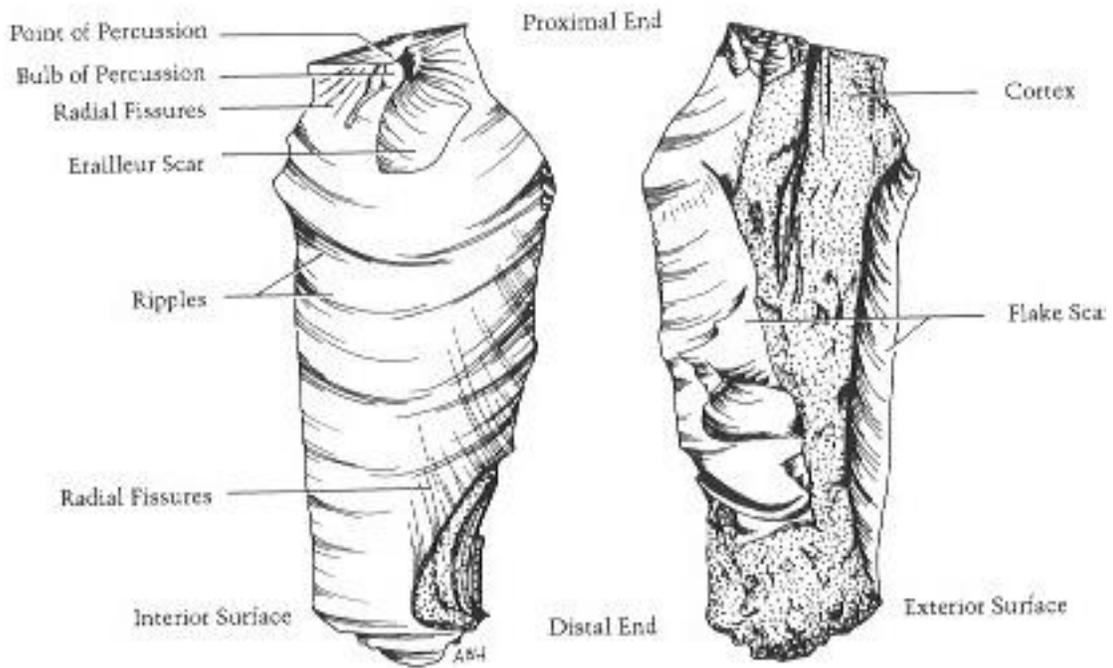


Figure 9: Flake and Attributes (Whittaker 1994:16)

5.1.4 Bifaces

A biface is an asymmetrical-shaped piece of stone typically ovoid in appearance (though it can be triangular and rectangular as well) that has had small rock fragments or *flakes* removed from both faces (Figure 10). This is a basic tool type that could be further shaped into a finished tool such as a projectile point, scraper, or knife or could be used as a chopping or cutting tool in its unfinished form. Similar to bifaces are unifaces, which have had flakes removed from only one side/surface.

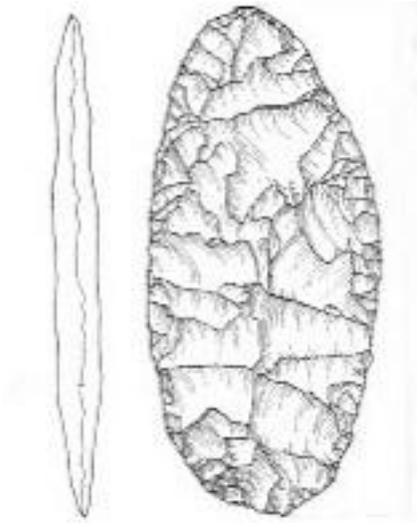


Figure 10: Biface (Andrefsky 2005:180)

5.1.5 Scrapers

Scrapers are tools that were used in hide preparation for clothing or other uses such as tipi coverings. Scrapers are formed from unifaces and are identified based on the presence of steep, convex edge either along a side (*sidescraper*) (Figure 11) and/or an end (*endscraper*) (Figure 12). A further class of scrapers called *thumbnail scrapers* can be identified by their small size, typically the size of a thumb- or finger-nail. These scrapers were likely hafted onto a handle.

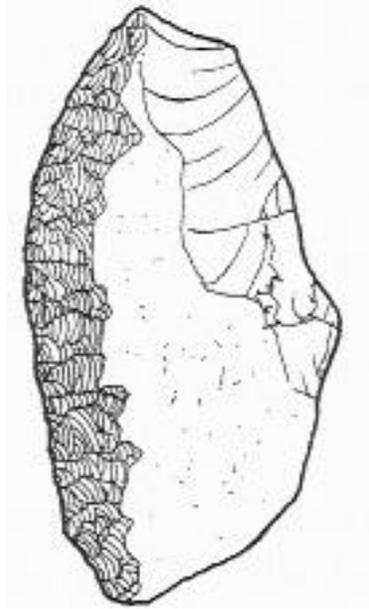


Figure 11: Sidescraper (Wilson 1983:28)



Figure 12: Endscraper (Wilson 1983:28)

5.1.6 Knives

Knives can be formed from bifaces. These tools tend to be very thin and have had extensive flake removals over both sides (Figure 13). Unlike scrapers, knives have a sharp cutting edge that indicates their function.

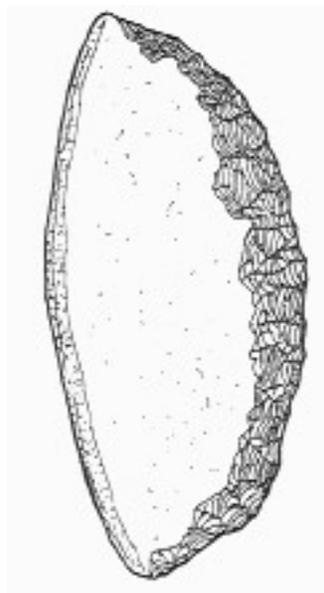


Figure 13: Knife (Wilson 1983:27)

5.1.7 Perforators, Borers, Gravers, and Drills

Perforators, borers, gravers, and drills (Figure 14) are a class of tools designed to create holes, grooves, and incisions in softer materials such as wood, bone, hide, etc. Typically, they all have a long, tapering working end with a wider base to facilitate hafting into a handle.



Figure 14: Drill

5.1.8 Burins and Spokeshaves

Burins (Figure 15) are similar to gravers; however, once a working edge has been created, small slivers of stone, called *burin spalls*, are removed perpendicular to the working edge thereby creating a triangular point on the tool. Burins, with their chisel-like edge, were used for engraving or carving bone or wood. Spokeshaves (Figure 16) are a unifacial (flake removal along one surface) tool with at least one concave working edge. They are believed to have functioned as a scraping, shaving, and smoothing tool for the shafts of spears and arrows.



Figure 15: Burin



Figure 16: Spokeshaves (Bubel *et al.* 2012:81)

5.1.9 Atlatl Weights

An *atlatl* weight (Figure 17) is a grooved and polished piece of stone complete with a hook on one end and a grip on the other. This artefact was hafted onto an *atlatl* handle to provide balance and distribute the weight of a spearthrower. This type of artefact is not commonly found in archaeological sites due to their ability to be reused repeatedly and not discarded. It is also likely that smaller stones of pebble and cobble sized could have been quickly shaped as *atlatl* weights and may not be as readily recognizable in the archaeological record as such.



Figure 17: Atlatl Weight (Bubel *et al.* 2012:85)

5.1.10 Projectile Points

Unlike the previous artefacts found in archaeological sites, projectile points show enough variation and change through time to be used as diagnostic tools in determining specific cultural groups in the past and have been used to help date archaeological sites when present. Often referred to as “arrowheads”, projectile points are the preferred name for the entire sequence of hunting weapons. They can be divided into spear points, *atlatl* dart points and arrow points based on when they were used and their form.

5.1.10.1 EARLY PRECONTACT (PALAEOINDIAN) PERIOD PROJECTILE POINTS

5.1.10.1a Clovis

The earliest projectile point type found in Saskatchewan is Clovis (Figure 18) which dates to approximately 12,000 to 11,000 years BP. The distinguishing feature on Clovis points is the presence of a *flute* or flake scar that extends from the concave base of the point up into the body. The flute can appear on one or both sides. These types of spear points are only found as isolated finds throughout the province and as of yet no intact archaeological sites dating to the Clovis period have been discovered.

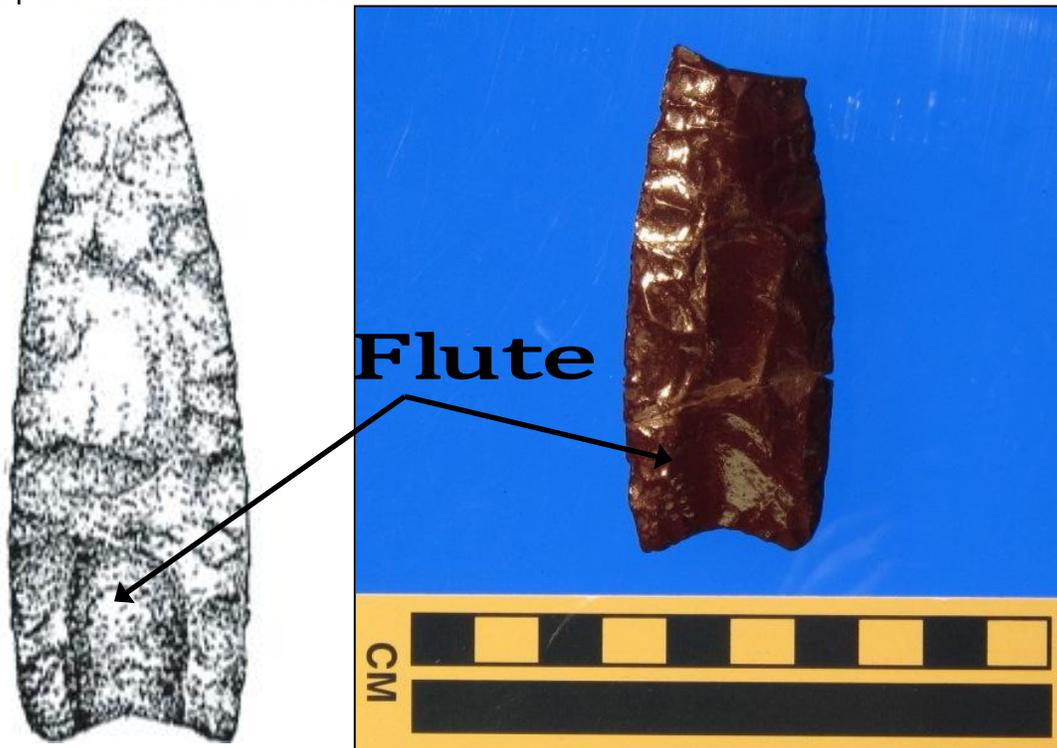


Figure 18: Clovis

5.1.10.1b Folsom

Also a spear point, Folsom projectile points (Figure 19) date between 11,000 and 10,500 years BP. Again, these have only been discovered as isolated finds in the province. Folsom points also display a flute that extends from the concave base of the point upwards into the body; however, these flutes tend to be much larger than Clovis flutes – covering nearly the entire length of the body – and the points themselves are smaller in length. The flute can appear on one or both sides as well and tend to be wider than flutes on Clovis points.

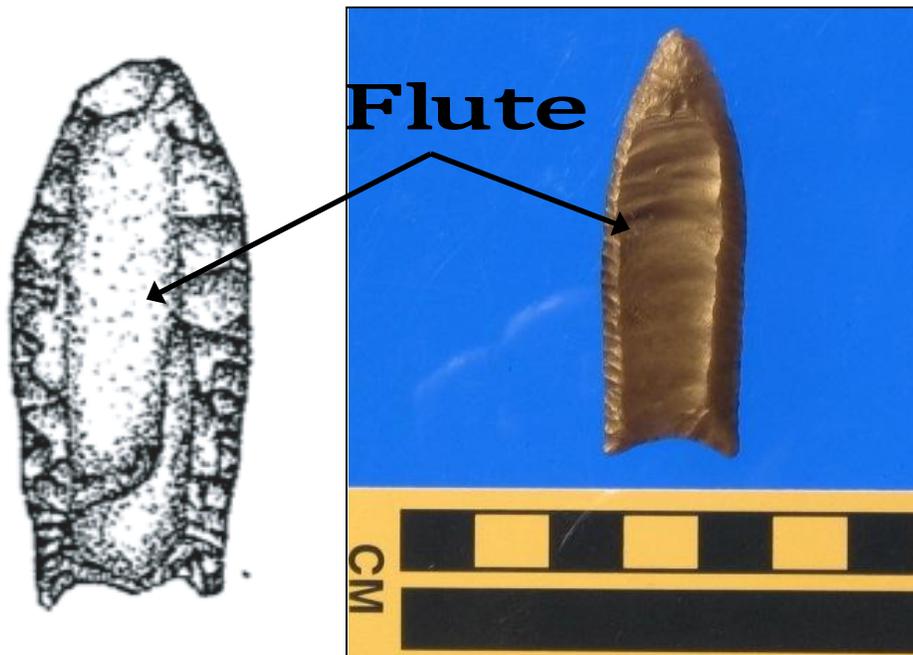


Figure 19: Folsom

5.1.10.1c Agate Basin

Agate Basin spear points (Figure 20) are known through isolated finds in the province and date between 10,500 and 9,500 years BP. These are large spear points with lanceolate or leaf-shaped body that constricts near the base and display parallel flake scars along the body.



Figure 20: Agate Basin

5.1.10.1d Hell Gap

Hell Gap spear points (Figure 21) are believed to have developed out of Agate Basin projectile points. In some archaeological sites on the Plains, they have been found in association with Agate Basin spear points. Hell Gap dates from 10,000 to 9,500 years BP. They are similar in shape to Agate Basin points, having a lanceolate shape but also display a constricted or slightly stemmed base.



Figure 21: Hell Gap

5.1.10.1e Cody Complex

Cody Complex denotes a number of spear points that have been found in association with each other at archaeological sites on the Plains. The Cody Complex dates from 9,500 to 8,400 years BP and includes Alberta (c. 9,500-9,000 BP), Scottsbluff (c. 8,800-8,400 BP) and Eden (c. 8,800-8,400 BP) projectile points as well as the Cody Knife (c. 8,800-8,400 BP). The majority of the artefacts found during the Cody Complex time period are discovered as isolated surface finds; however, the earliest archaeological site in Saskatchewan has an occupation layer dating to the same time period as Scottsbluff and Eden spear points. Both the Alberta (Figure 22) and Scottsbluff (Figure 23) spear points are identified by the presence of a distinctive stemmed base, although the Alberta point tends to have a longer stem than that of Scottsbluff. Eden projectile points (Figure 24) differ markedly from Alberta and Scottsbluff points. Typically, very long and narrow, with a slight stemming of the base, these points show uniform collateral flaking across both surfaces. The Cody Knife (Figure 25) is a unique artefact in that it is considered a diagnostic artefact despite it not being a projectile point. This artefact is stemmed with a visible shoulder and displays a transverse working edge.



Figure 22: Alberta



Figure 23: Scottsbluff



Figure 24: Eden



Figure 25: Cody Knife

5.1.10.1f Late/Terminal Palaeoindian Lanceolate Projectile Points

The Late or Terminal Palaeoindian Lanceolate Complex includes a number of projectile points forms that have been found in the province. A small number of projectile points identified as Angostura (Figure 26), Lusk, James Allen, Frederick, Lovell Constricted and Pryor Stemmed do exist in Saskatchewan archaeology although not in great quantities. This transitional period is not well understood but may reflect interaction between Plains and Rocky Mountain cultures. Angostura projectile points denote one of the final Palaeoindian cultural complexes in the province and have been found as far north as the Churchill River Basin. Dating between 8,400 to 7,500 years BP, Angostura spear points display an overall lanceolate shape with a slightly constricting and concave base.



Figure 26: Angostura

5.1.10.1g Northern Plano

Northern Plano projectile points (Figure 27) are found in northern Saskatchewan and date between 8,000 to 7,000 years BP. It is virtually indistinguishable from Agate Basin spear points and is believed to represent one migration of Agate Basin peoples out of Alaska following caribou herds in the north, while another migration moved south onto the Plains hunting bison herds (Meyer 1999:24).



Figure 27: Northern Plano

5.1.10.2 MIDDLE PRECONTACT PERIOD PROJECTILE POINTS

5.1.10.2a Mummy Cave Series

Mummy Cave is considered to be another series of points labeled together as a complex. This complex dates to 7,500 to 5,000 years BP and includes projectile point forms called Blackwater, Bitterroot, Hawken, Gowen (Figure 28), and Mount Albion. All of these projectile point forms represent the earliest expression of side-notching except for Mount Albion which displays corner-notching. The Mummy Cave series represents the introduction of *atlatl* or spearthrower technology and subsequent projectile points are referred to as dart points.



Figure 28: Gowen

5.1.10.2b Oxbow

The Oxbow projectile point (Figure 29) date between 4,700 to 3,800 years BP and are one of the most commonly discovered projectile points in Saskatchewan. Oxbow is believed to be linked to the earlier Mummy Cave complex possibly indicating a local origin of the former group. Displaying side-notching with a concave base, they are also easily distinguished by the presence of an “ears” on the basal edges. Oxbow dart points have demonstrated extensive re-sharpening and thus reworking of the overall form, which causes a diminution in overall size and a range of sizes from quite large to quite small.



Figure 29: Oxbow

5.1.10.2c McKean Complex

McKean Complex projectile points tend to overlap the date range of Oxbow projectile points dating from 4,100 to 3,100 years BP. They are believed to be an intrusive culture into Saskatchewan likely out of the western United States (Walker 1999:26). This complex is made up of three projectile point styles called McKean, Duncan and Hanna. McKean dart points (Figure 30) are triangular with a deeply indented base, Duncan points (Figure 31) display slight stemming with a concave base and rounded shoulders, while Hanna points (Figure 32) alone possesses side-notching along with a concave base.



Figure 30: McKean



Figure 31: Duncan



Figure 32: Hanna

5.1.10.2d Pelican Lake

Pelican Lake is the final cultural complex of the Middle Precontact period and shows a switch from side-notching to corner-notching. These projectile points are very straight, sharp and triangular (Figure 33). Dating to approximately 3,300 to 1,850 years BP, it has been suggested that Pelican Lake might be an early expression of bow and arrow technology; however, no conclusive determinations have yet been made (Walker 1999:26).



Figure 33: Pelican Lake

5.1.10.2e Late Middle Precontact Period Projectile Points

This terminal period of the Middle Precontact period as well as the early portion of the Late Precontact period poses some uncertainty in regards to Saskatchewan archaeology. A number of transitional projectile point styles labeled as Sandy Creek show similarities to earlier Pelican Lake and later Besant/Sonota projectile points. Sandy Creek points (Figure 34) are also side-notched and date between 2,450 to 1,950 years BP. However, there is some debate whether they are related to Pelican Lake, Besant or some other as yet unnamed cultural group. Further research is necessary to conclusively determine what is occurring in the archaeological record for this time period.



Figure 34: Sandy Creek

5.1.10.3 LATE PRECONTACT PERIOD PROJECTILE POINTS

5.1.10.3a Besant

The Besant culture represents the first expression of the widespread use of bow and arrow technology as well as pottery. Besant dates from 2,000 to 1,150 years BP and includes side-notched Besant projectile points (Figure 35) that may have still been used as dart points with spearthrower technology as well as smaller Samantha projectile points (Figure 36) thought to be used as arrow points. Characteristic of Besant is the predominance of Knife River Flint, a rock material found in North Dakota, as a raw material for tool production. Sonota complex artefacts are often labeled as being a part of Besant culture; however, Sonota likely represents a separate cultural expression moving northward into Saskatchewan out of the Middle Missouri area of the United States. There are similarities (e.g. use of large quantities of Knife River Flint) between the two groups that may suggest that Besant is partially related to Sonota.



Figure 35: Besant



Figure 36: Samantha (Line drawing from Vickers 1986:81)

5.1.10.3b Avonlea

Avonlea culture is contemporaneous to Besant, dating between 1,800 to 1,150 years BP. Avonlea projectile points are small, thin and triangular side-notched arrow points typically made off of flakes (Figure 37). The base tends to be slightly more concave that what is typically found in Besant projectile points.

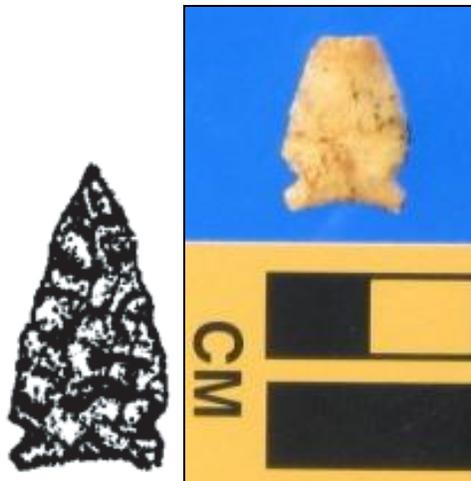


Figure 37: Avonlea

5.1.10.3c Prairie Side-Notched

Prairie Side-Notched projectile points (Figure 38) are one of the final Late Precontact Period artefacts and are often found in association with Old Women's pottery in the west and Blackduck pottery in the east. These arrow points date from 1,200 to 550 years BP and display side-notching close to the base.



Figure 38: Prairie Side-Notched

5.1.10.3d Plains Side-Notched

Plains Side-Notched is contemporaneous with Prairie Side-Notched groups, dating to approximately 550 years BP and is associated with Mortlach pottery. Side-notching on these arrow points are much higher up along the outside edges and display a more triangular form (Figure 39).

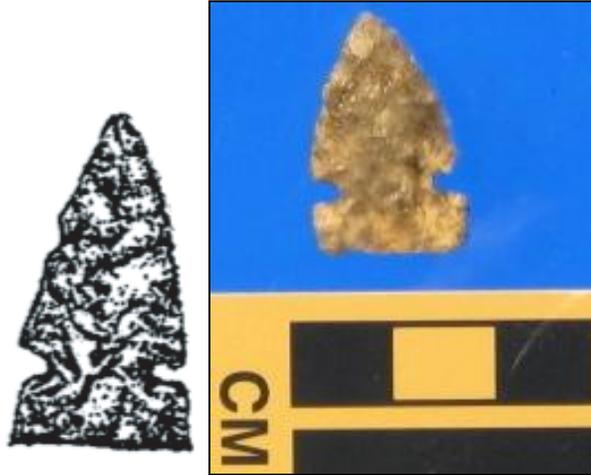


Figure 39: Plains Side-Notched

5.1.11 Bone Tools

While not as prevalent as stone tools due to their likelihood to decay over time, bone and even wood tools would have been just as important in the daily lives of past cultural groups in Saskatchewan. Where they exist, bone tools are identified by the modifications that have been made to them. This can include the presence of grooves, holes, scratches, polish, etc. and the overall change in shape of the tool to suit a utilitarian function. Long bones could be manipulated to form handles for stone tools, hide fleshers (Figure 40), and needles while scapulae were often used as shovels and saws. Ornaments such as beads and pendants were constructed from bone as well. Additional parts from a wide variety of faunal species including bison, birds, small mammals, etc. could be used to make additional personal adornments (i.e. quills, tooth, claw, and antler elements).



Figure 40: Bone Flesher

5.1.12 Pottery

Pottery, made of fired clay containing grit or *temper*, appears in the archaeological record of Saskatchewan approximately 2,000 years BP (Figure 41). That is not to say that groups prior to this period did not have the means or the knowledge to produce pottery, it is yet undiscovered and people would likely have used a variety of different materials as storage containers or cooking pots prior to the appearance of pottery. Artefacts such as hide bags and nets likely did exist; however, they rarely appear in the archaeological record due to their potential for rapid decay. Pottery can be used as a diagnostic artefact to determine cultural affiliation or date ranges when found in archaeological sites. They are often found in association with projectile points as well.

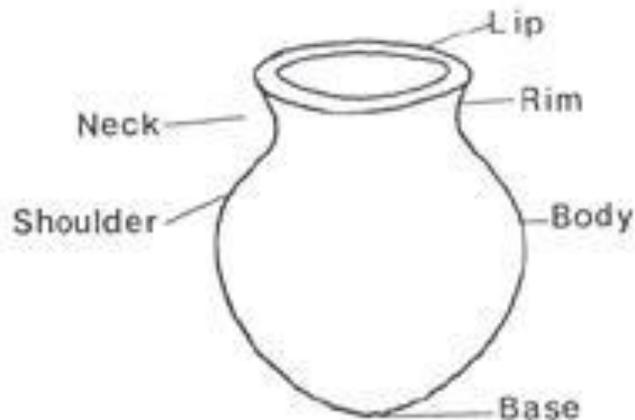


Figure 41: Typical Pottery Vessel

5.1.12.1 Laurel

Laurel pottery is considered to be part of Middle Woodland cultures found in northeastern Saskatchewan, Manitoba and northern Ontario (c. 1,000 years BP) and is contemporaneous with the beginning of the Late Precontact Period. This type of pottery (Figure 42) was created via a coiling technique, a conoidal in shape and exhibited decorations on the smoothed, exterior surface in the form of punctates (holes) and dentates (toothed) impression on the upper rim.



Figure 42: Laurel Pottery

5.1.12.2 River House

River House pottery (c. 1,220-850 years BP) is generally contemporaneous with Laurel pottery although it has a different geographical distribution. This type of pottery is found along the North Saskatchewan and Saskatchewan River Valleys eastward into west-central Manitoba. River House is characterized by two types of pottery; one that is very similar to Laurel and one that is net-impressed (Figure 43). The pottery that is similar to Laurel differs in terms of decoration with cord-wrapped tool impressions instead of dentates (Meyer 1999:23).



Figure 43: River House Pottery

5.1.12.3 Blackduck

Also contemporaneous with Laurel and River House pottery is Blackduck pottery out of central and southern Manitoba that eventually moved into central and eastern Saskatchewan (c. 1,000-650 years BP). This type of pottery is globular in shape and show decorations on the rims and necks (Figure 44). In southern Saskatchewan this type of pottery has been found in association with Prairie Side-Notched projectile points.



Figure 44: Blackduck Pottery

5.1.12.4 Narrows

Limited to the upper Churchill River Basin is a type of pottery known as “Narrows” (Figure 45). This type of pottery displays a cord-roughened exterior and a row of punctates along the rim and dates to the Late Woodland Period (c. 700-500 years BP).



Figure 45: Narrows Pottery

5.1.12.5 Selkirk

Selkirk pottery is widespread across northern Saskatchewan during the latter half of the Late Precontact Period (c. 600-300 years BP). Globular pots possess woven textile-impressed exteriors as well as some decoration (Figure 46).



Figure 46: Selkirk Pottery

5.1.12.6 Besant

Besant pottery is found in association with Besant projectile points in southern and central Saskatchewan. Dating to the Late Precontact Period, this pottery displays a conoidal shape with either a cord-marked or smoothed exterior surface and a single row of punctates on the rim (Figure 47).



Figure 47: Besant Pottery

5.1.12.7 Avonlea

Associated with projectile points of the same name, there are three main types of Avonlea pottery distinguished by their exteriors: net-impressed, spiral-channeled and smooth (Figure 48). Where decoration exists on Avonlea pottery it is usually rows of punctates or a series of horizontal incisions along the rim.

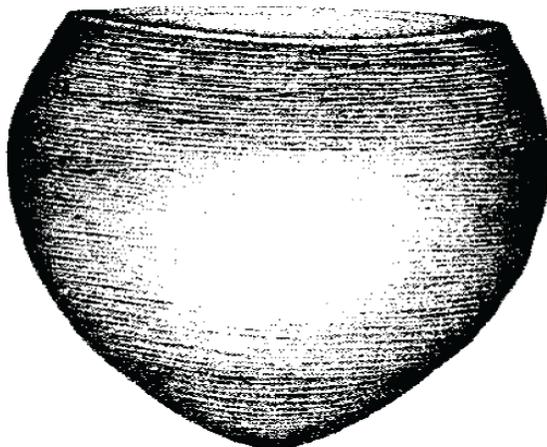


Figure 48: Avonlea Pottery

5.1.12.8 Old Women's

Typically associated with Prairie Side-Notched projectile points, Old Women's pottery is found in west-central and southwestern Saskatchewan. The pottery is either cord-impressed or fabric-impressed and is globular in shape with distinctive shoulders, constricted necks, and flaring rims (Figure 49). Old Women's pottery does not always display decoration but when it does this can include incisions, tool impressions, or punctates.



Figure 49: Old Women's Pottery

5.1.12.9 Mortlach

Mortlach pottery is found in southeastern and southern Saskatchewan and is unique in that it shows an amalgamation of different pottery traditions such as Selkirk and Middle Missouri influences (Figure 50). This pottery shows affinities to Selkirk ware such as textile-impressed exteriors, rim punctates and toll impressions. Middle Missouri influences are seen in the presence of check-stamped and incised impressions. Mortlach pottery is found in association with Plains Side-Notched projectile points.



Figure 50: Mortlach Pottery

5.2 Historic Artefacts

Historic artefacts are found in Saskatchewan archaeological sites both prior to after European contact. Initially they are found as trade items in First Nation sites prior to European contact in western Canada. Many Historic Period artefacts are the result of manufacturing processes originating in Europe.

5.2.1 Metal Objects

Metal objects include any objects constructed out of metal that may or may not be in its original form. Certain metal objects kettles and pots were traded to First Nations groups to be used as cooking vessels but were instead reconstructed into other objects such as metal trade points. Metal trade points (Figure 51) were constructed for the same usage as stone projectile points, although stone projectile points continued to be used after European contact. Metal in the form of nails is abundant in Historic Period archaeological sites.



Figure 51: Metal Trade Point

Nails are considered to be a diagnostic artefact for sites dating to this period due to their differing manufacturing techniques and age of manufacture. The earliest nails found in archaeological sites are hand wrought and are distinguished by a tapered and square shank as well as a number of different heads (e.g. rose head, rose T head, circular flat head and clinched head). Machine cut nails appear as of the late 18th Century and can be identified based on their uniform thickness and triangular shape. Wire drawn nails are the youngest in age and date to the 19th Century. They are the most similar to modern nails with a uniform head, rounded shank and diamond-shaped tip.

Tin cans are also ubiquitous in Historic era sites. Again, these artefacts can be used as a dating tool as well as provide insight into consumption habits, diet, and migration patterns. Similar to nails, the construction of tin cans can also be used as a diagnostic tool. The earliest tin cans were hand cut from treated-sheet metal that was bent and soldered into shape. These date from the early 19th Century until 1920 and are referred to as Hole-in-Cap cans. Sanitary cans

did not involve being soldered shut and as such were airtight and less likely to spoil. They first appear in 1898 as “Ams cans” and are comparable to our modern cans. Finally, Hole-in-Top cans appear after 1885 and were typically used for evaporated milk.

5.2.2 Buttons

There are many different button types found in Historic Period archaeological sites. Utilitarian buttons tend to be plain and not useful for dating; however, military buttons, for example, can be used for dating purposes. Buttons are distinguished by the material they are constructed from (e.g. wood, shell, bone, metal, glass, etc.), the general shape (e.g. convex, concave), the presence or absence of a shank, and also decoration. Military buttons can be helpful in determining not only a date but also which regiment was stationed in a particular location based on design and decoration found on buttons. Occasionally found at sites, such as South Branch House, are buttons that display the insignia of fur trade companies such as the Hudson’s Bay Company Beaver Button (Figure 52).



Figure 52: HBC Beaver Button
(Howard Titman for the Saskatchewan Archaeological Society)

5.2.3 Smoking Pipes

Pipes are very common in Historic period archaeological sites. Due to their propensity to break, pipes were discarded rather frequently and it is not uncommon to come across broken stems and bowls. Smoking pipes did exist prior to European contact but are not typically found in Precontact archaeological sites due to their ceremonial significance and as such were highly prized and well cared for. European contact allowed for more disposable pipes that were mass-produced to enter into the archaeological record. Pipes can also be used as a dating tool based on their form and any manufacturing marks (Figure 53). Smoking pipes change through time on the basis of their decoration, typically seen on the bowl, the bore diameter, the bowl shape, and their country of origin (English, Scottish, Canadian and American).

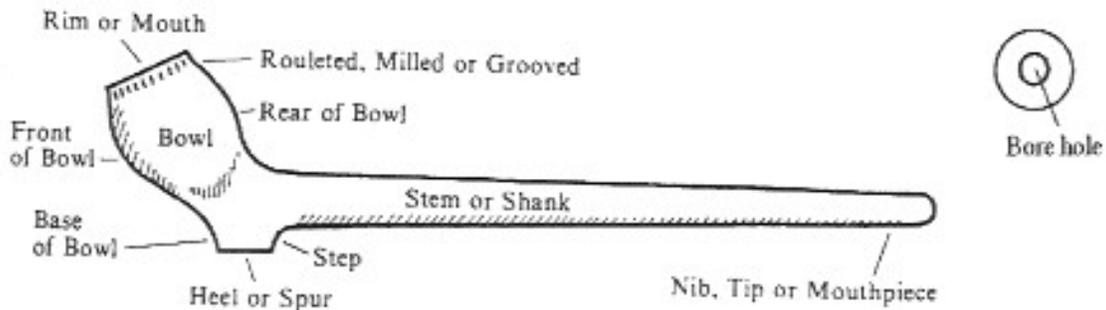


Figure 53: Smoking Pipe (Ayto 2002:2)

5.2.4 Glass

Glass can be found in many forms in archaeological sites such as window glass, bottle glass, and decorative glass (e.g. lanterns). Again, glass can be used as a dating marker based on composition and manufacturing techniques. Temporal changes of glass are based on its composition. The main constituent of glass is silica (via sand) with added in materials that act as a stabilizer. These additional materials can be soda-lime, potash-lime, potash-lead and lime and their usage in creating glass dates to different time periods. An additional method of dating glass is through its manufacturing technique. Again, dating to different time periods are different techniques such as blown glass, dip moulding, tow and multiple piece moulds, post base moulds, cup base moulds, three piece or Ricketts moulds and turn/paste moulds. Glass can also be dated based on the presence of maker's marks or trademarks usually found on the base.

5.2.5 Beads

Beads can be manufactured from a number of different raw materials such as glass, plastic and bone (Figure 54). European settlement introduced glass and later plastic beads into

archaeological sites in Saskatchewan. Beads were used for personal adornment and also as a currency in some trade relationships. They can be used as a dating tool based on their material makeup and formation.

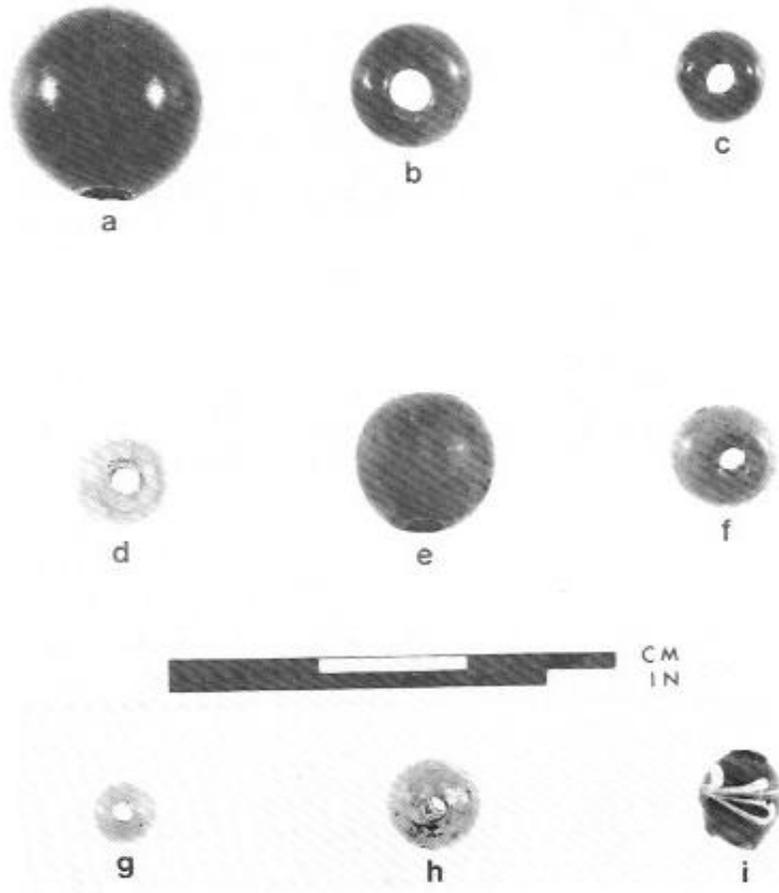


Figure 54: Miscellaneous Beads (Karklins 1981:89)

5.2.6 Arms and Ammunition

European contact and trade introduced the gun onto the Plains. The first guns date to the late 16th and early 17th centuries and are flintlock muskets. An important part of a flintlock musket was the presence of a *gunflint* (Figure 55) necessary in order to create a spark and fire the gun. Gunflints are often confused with scrapers based on a very basic similarity in shape. However, they tend to be rectangular and uniform in shape and come in a wide variety of colours and imported raw material types, although occasionally local stone was used.



Figure 55: Typical Gunflint

Breech-Loaders marked an important change in how firearms were loaded. This type of gun was introduced after 1840. Shotguns appear as early as the 1600s but the more common double-barreled shotgun appears after 1875. Where firearm parts are present in archaeological contexts, dating can be established. However, more commonly found are the remnant cartridges and musket balls that can be identified based on shape, size, and manufacture marks.

5.2.7 Ceramics

The terms “ceramics” and “pottery” denote different manufacturing techniques. Pottery is found prior to European contact whereas ceramics were introduced with the arrival of Europeans. The majority of ceramics found in archaeological sites in Saskatchewan were manufactured overseas. There are a number of different types such as earthenware, stoneware, and porcelain; each with numerous subdivisions. Within each of these subdivisions are multiple different pattern or decoration types that are too numerous to mention in detail (Figure 56). For a more detailed discussion of specific ceramic types and patterns, see Sussman (1979) and Godden (1966). Ceramics can be dated based on the type of manufacture, patterns and the presence of maker’s or manufacturer’s marks.



Figure 56: Spode-Copeland Ceramic Pattern – “Willow”

(Sussman 1979:236)

6.0 Omars and Geofacts

Along with archaeology, the province of Saskatchewan can exhibit a wide range of palaeontological and geological material. Much of the paleontological material found can be easily distinguished as such and predates any human presence in the province; however, there are some geological specimens known as geofacts and omars that are difficult to identify as non-archaeological.

Geofacts are geological examples that upon a very quick initial examination may appear to have been made by human hands (Figure 57). This can include examples of rocks that show grooves, incisions, or cupules believed to be of human origin when in fact they are the product of geological formation processes such as erosion. Geofacts may also be naturally fractured pieces of rocks that do not exhibit any of the attributes that identify it as the product of human manipulation.



Figure 57: Geofacts

Tuckahoe is a commonly found geofact in Saskatchewan that is usually believed to be “fossilized” pemmican. However, more often than not, the object in question is a sample of Tuckahoe, a root fungus that is common throughout the province (Figure 59).



Figure 58: Tuckahoe

Omars are a geological specimen but may also be considered as a geofact. These are rock cobbles that display either a singular or multiple voids or pits (Figure 58). Omars are believed to have been created through human hands by grinding out rock to create pits for fire starting. However, they are actually a type of glacial erratic composed of siliceous greywacke with weathered-out or eroded calcareous concretions (Prest *et al.* 2000). These pits, holes, or voids tend to be very coarse and uneven. Omars are thought to have originated in the Omarolluk Formation of the Belcher Group in southeastern Hudson's Bay and were spread westward into the prairie provinces by glacial advance in the past (Prest *et al.* 2000).



Figure 59: Omars

7.0 Heritage Legislation in the Province of Saskatchewan

While Saskatchewan does not possess huge monuments left behind by vanished cultures, there are still numerous, fascinating archaeological resources and places that may be enjoyed and responsibly used.

For the most part, the archaeological resources suitable for tourism use are found on the surface of our land, as described below. As for buried remains, one rule is clear, as embodied in the Saskatchewan *Heritage Property Act*: No one may dig, or search, for archaeological remains without a permit from the Minister in charge of archaeological heritage. Such a permit is issued only to qualified archaeologists, and its issuance involves stringent reporting requirements. The first rule for visiting sites is, therefore, that **“No one is to dig, scratch, pry or otherwise probe beneath the rocks or soil in any manner to look for archaeological artefacts.”**

We do possess a rich legacy of archaeological resources (sites, artefacts, and features) spread across the surface of the land of Saskatchewan, which, unlike the buried ones, can be quite visible to the trained eye and accessible to archaeologists and non-archaeologists alike. While what lies below us is as yet unknown, there are many archaeological sites, features and artefacts on the land’s surface which are undiscovered, and many which have been “discovered” but are unrecorded. The process of documenting these surface phenomena is every bit as important as careful scientific excavation of buried archaeological components. Every year avocational and professional archaeologists and others find “new” sites, and our knowledge and site inventory grow apace.

7.1 Proposed Guidelines for Visits to Archaeological Sites in Saskatchewan

These guidelines apply to all persons, including individual visitors, tourism operators, and agents and representatives of the operators. If only one rule was expressed, it would be “Take only pictures, leave only footprints”. However, even this is not a sufficient guideline for care, since foot traffic can surely damage archaeological sites and features. A better statement that applies to tourism, which claims to follow sustainable and proper cultural or ecotourism principles is, “Take only pictures, and tread as lightly as possible on the landscape”.

The chief reason for insisting that every archaeological item - or fragment - remain where it was found is to try to ensure that all such evidences remain to be studied more carefully and unobtrusively in the future.

If every visitor to a northern portage site were to remove just one tiny quartz flake or fragment, for example, the site would be altered irreparably in a very brief period of time, because these sites are generally very small, with few artefacts. Thus it is essential that no visitor remove anything from any archaeological site.

7.2 General Guidelines

- 1. Visitors should respect the letter and spirit of laws meant to ensure protection and conservation of both the natural and human heritage of all archaeological sites.*
- 2. Visitors should respect the feelings and beliefs of the many Aboriginal cultures and communities who hold certain places to be historically important and/or sacred, and they should respect the dignity and the remains of the human societies who created the artefacts and features at any particular site.*
- 3. Visitors should respect any particular guidelines for visiting Aboriginal heritage sites established by or in consultation with Aboriginal communities.*
- 4. Visitors should respect the rights of landowners and tenants in the case of leased or owned land, and of all citizens in the case of Crown Lands.*
- 5. No person shall dig, probe, or otherwise seek to discover any archaeological or other objects or soil deposits, either using bare hands or any instruments, without a valid and subsisting permit from the appropriate government agency.*
- 6. If unrecorded artefacts or features are discovered either at a known site or while travelling to or from a site, the appropriate agencies should be notified (Saskatchewan Heritage Conservation Branch in Regina).*

7.3 Site-and Resource-Specific Guidelines

- 1. No one shall remove archaeological artefacts exposed on the surface (stone chips, flakes and tools; fire-fractured rock; broken bone; metal; glass; pottery sherds or anything else) from any site unless they have a valid and subsisting permit from the appropriate government agency.*
- 2. The most common surface remains encountered in northern Saskatchewan are flakes and artefacts of quartz and to a lesser extent other materials, Fur Trade artefacts of metal manufacture, and mining structures and equipment found in clearings, portage trails, or on outcrops. No one shall collect or remove any such materials (however small) from any site without a permit.*
- 3. Aboriginal pictographs – paintings on vertical rock surfaces adjacent to the waterways – should not be touched in any way by human hands or instruments. This includes touching them directly with the hands, using chalk, crayon or any substance to “enhance” their appearance for photography; brushing, scraping or otherwise removing lichen or algae growths from the painted rock faces, or splashing or spraying water on the paintings for photography purposes. All such practices are actually or potentially harmful to the preservation of these features.*
- 4. Erratic or field-stone surfaces bearing carved or ground-in figures (rock carvings or “petroglyphs”) made by Precontact Aboriginal artists, must not be touched in any way by visitors’ hands or feet, nor should any substances (such as water or chalk) be applied to them to*

make them clearer for photography purposes. No soil or plant growths affecting such rock carvings shall be removed or otherwise disturbed.

5. In southern Saskatchewan, surface artefacts can be plentiful at many archaeological sites, exposed either by natural wind and water erosion or by human activities such as farming, road or reservoir construction, etc. All such artefacts must be left in place unless a person holding a valid permit is studying them and recording their context.

6. A major type of archaeological feature found on or above the soil surface in southern Saskatchewan is a variety of stone configurations (including stone circles, cairns, medicine wheels and figures of animals and humans, and lines of stone). Since all stone configurations are fragile resources that have the high potential to be disturbed by machinery and even human foot traffic, visitors must ensure that their movements do not in any way dislodge or remove any of the stones in these features. Geological and botanical studies of these constructions depend on maintaining their physical integrity. In addition to not moving stones, visitors should avoid walking on them to avoid altering the growth of the lichens, which grow on their surface.

8.0 If You Have Questions About Archaeology

Nature and human activities are constantly altering the soil surface, and exposing archaeological artefacts. As well, surface features like stone cairns or petroglyphs may still await discovery in remote or unbroken land. If you do discover something, which you think is archaeological there, are a number of places where you can obtain information about your find.

First, if the material is buried or partially buried, or if it is an intact feature like a tipi ring, etc. - do not disturb it - take a photograph or two (with something for scale in it), and ask one of the following offices to identify the feature.

If you come across an artefact (or have artefacts collected earlier) and wish to have them identified, either bring the artefact to one of the archaeology offices, or send a good photograph. Again, you should not simply collect artefacts as curiosities or only for your own collection. Every artefact taken from the soil of Saskatchewan should have its exact location recorded and those records deposited in a responsible public institution.

All archaeological excavations, any disturbance of archaeology sites, and collection of artefacts in Saskatchewan are regulated by the Saskatchewan Heritage Property Act, and administered by the Heritage Unit of the Provincial Government.

The following offices have professional archaeologists who can answer your questions about archaeology:

1. **Saskatchewan Archaeological Society**, Saskatoon, Phone: 306-664-4124
2. **Department of Archaeology and Anthropology**, University of Saskatchewan, Saskatoon, Phone: 306-966-4175
3. **Heritage Conservation Branch**, Ministry of Parks, Culture and Sport, Regina, Phone: 306-787-2817
4. **Royal Saskatchewan Museum**, Aboriginal History Unit, Regina
Phone: 306-787-1644

*If you wish to visit any of these offices personally, you should telephone ahead.

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**Note: Images of pottery or line drawings of projectile points where they are not cited individually were gathered from the following source:

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