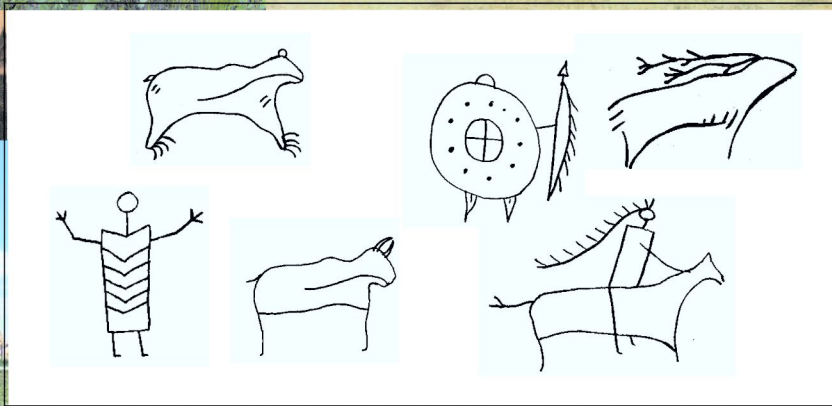
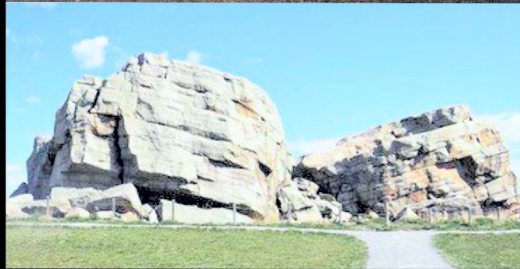
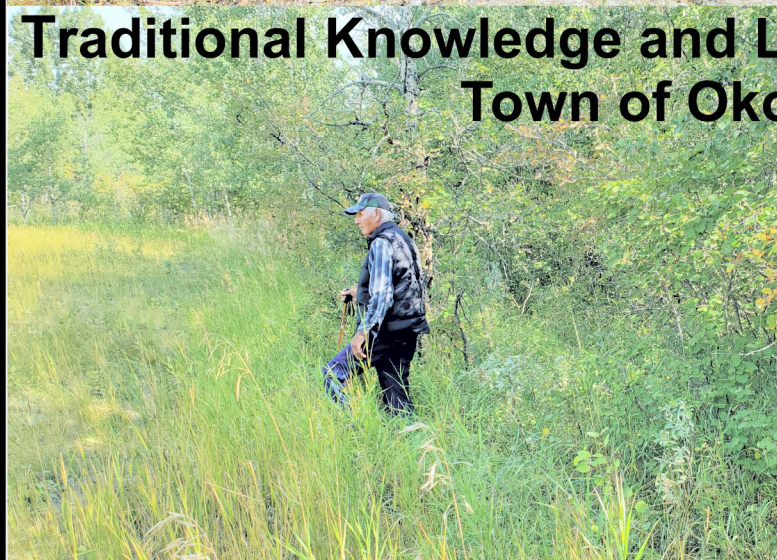




Traditional Knowledge and Land Use Assessment Town of Okotoks



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We acknowledge the Town's foresight and efforts to preserve, protect and honour First Nations/Indigenous culture, history and recognize the Town and region as being within the heartland of the collective territory of the southern Alberta First Nations. We especially acknowledge the assistance, information and support provided by Town of Okotoks staff Jeff Greene, Karen Humby, Janette Messer and Kathy Coutts.

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EXECUTIVE SUMMARY

Arrow Archaeology Limited in cooperation with the Consultation Departments of Kainai, Piikani, Siksika, Tsuut'ina and Stoney Nakoda First Nations conducted a Traditional Knowledge and Land Use Assessment (TKLUA) of land within the Town of Okotoks. The assessment focused on undisturbed and minimally disturbed terrain primarily within the Sheep River Valley. The intention of this TKLUA was to identify important traditional resources and land use sites in the Town, and to summarize and describe the very long historical and cultural importance of the area in which the Town is situated. The Okotoks region has been the heartland of southern Alberta First Nations' territory for more than 10,000 years and the land still bears the marks of its cultural, historical and economic importance. This report provides information on traditional resources and other cultural landscape elements within the Town that are important to First Nations' culture and history. The intention is to provide an understanding of how land occupied by Town of Okotoks provides a sense of First Nations' pride of place and historical importance. It is the hope of Elders, experts and other First Nations people that this work will help preserve and protect traditional and natural resources and landscape elements within Okotoks.

The area in which Okotoks is situated is important to First Nations for a variety of cultural and environmental reasons. These include, but are not limited to, the rich and variable native plant and animal life of the region and its location in Alberta's chinook belt, an important consideration given the highly seasonal climate of Alberta. The area was prime habitat for bison and the area was an important wintering area, although people were present in the general area year-round.

The report discusses history, traditions, cultural ecology, beliefs, socioeconomic systems and other elements of culture, emphasizing knowledge, history of land use and the historical arc of the Blackfoot, Stoney Nakoda and Tsuut'ina in the Okotoks area. Fieldwork focused on assessing the nature and conditions of minimally disturbed lands in the Sheep River valley via physical field inspection and consultation with and between Elders and experts. The field team examined accessible natural areas in both warm and cold season conditions, recorded naturally occurring plants, discussed oral histories and

traditions of use and presence in the valley, seasonal occupations, the proximity of the Town to highly significant cultural locations, including but not limited to the Big Rock, the fording locations used by travelers along the Old North Trail, the confluences of the Sheep and Highwood Rivers and the Highwood and Bow Rivers, and major large-scale bison hunting sites. An important element of the TKLUA was to assess remaining natural lands in the river valley in order to make inferences of their potential to contain as yet unrecorded, unverified remains of past occupations, such as habitation and ceremonial sites.

We also conducted archival and published research that was relevant to this project including, but not limited to, topographic maps and historical air imagery of the area, ethnobotanical works relevant to southern Alberta First Nations, archaeological site research conducted in the Town of Okotoks since enactment of the *Alberta Historical Resources Act* and other historical information and data. We examined Town of Okotoks maps such as land use and maps of lands owned by the Town of Okotoks. Several recent Town Master Plans were reviewed to determine their relevance and applicability to issues related to the TKLUA.

The report provides 21 recommendations that relate to the traditional, historical and cultural significance of the Okotoks area to the Blackfoot, Tsuut'ina and Stoney First Nations. In the case of the Okotoks TKLUA, the primary goals were to:

- 1) Identify extant traditional resources within the town.
- 2) Help to identify undisturbed or minimally disturbed areas that had potential to contain traditional resources even if resources were not identified in those areas
- 3) Provide information and data on traditional resources and traditional resources potential in order to help protect and preserve those resources for all people
- 4) Increase awareness in Okotoks of the area's historical and cultural importance for First Nations whose territories include the land occupied by the Town.
- 5) Help Okotoks recognize and honour the 12,000 years or more years that the area has been the home of southern Alberta First Nations.

The recommendations provided in the report are also intended to improve awareness of the effects and impacts of past efforts of cultural assimilation. In so doing, we have tried to address some of the Calls to Action of the Truth and Reconciliation Commission that may be within Okotoks capability to address, such as promoting preservation of languages. We wish specifically to acknowledge the Town of Okotoks' leadership in this genuine and concerted effort to address the recommendations of the Truth and Reconciliation and the principles of the United Nations Declaration on the Rights of Indigenous Peoples.

The Town of Okotoks occupies an area that has outsized significance to southern Alberta First Nations. It is in their collective territorial heartland and, based on both historical accounts and the archaeological record, humans have been here throughout the Holocene Epoch, that is since time immemorial. The Town has perhaps a near unique opportunity to help inform and educate Town residents and the general public on both the rich history of southern Alberta First Nations and the significant sacrifices made by all First Nations people through loss of their land and way of life. The Town can help celebrate First Nations past and continuing contributions to the cultural richness of Alberta and Canada by recognizing and honouring First Nations culture and history of the area in which Okotoks is located.

Disclaimer

This Traditional Land Use and Assessment Report is solely intended to provide information on First Nations culture, history, occupancy and use of the area now occupied by the Town of Okotoks in the period before the development of the Town. This report cannot be used to support, refute and/or deny any legal or quasi-legal arguments regarding First Nations use, occupancy or territoriality. Any errors of fact or other error(s) herein are strictly the responsibility of the authors of this report. This report was produced for the Town of Okotoks and cannot be reproduced without the express permission of the Town. Information from this report can be used in academic or other scholarly works if it is appropriately cited.

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INTRODUCTION

Arrow Archaeology Limited in cooperation with the Consultation Departments of Kainai, Piikani, Siksika, Tsuut'ina and Stoney Nakoda First Nations conducted a Traditional Knowledge and Land Use Assessment (TKLUA) of land within the Town of Okotoks. The assessment focused on undisturbed and minimally disturbed terrain primarily within the Sheep River Valley. Culture-historical research was based on First Nation Elders' knowledge and expertise, as well as literature research by First Nation authors and 19th and early 20th century non-First Nations persons who lived with and/or interacted with First Nations people in what is now southern Alberta. The study was undertaken through a Town of Okotoks initiative.

The intention of this TKLUA is to identify important traditional resources and land use sites in the town, and more importantly in our view, to summarize and describe the extensive historical and cultural importance of the area in which the Town is situated for southern Alberta First Nations. The area has been home to hundreds of generations of First Nations people, and although there are few physical remains of that long occupation in what is now the Town of Okotoks and its surrounding lands, the resources and reasons why this area is culturally and historically important to First Nations remain. In addition, minimally and undisturbed land in the Town have significant potential to contain as yet unknown physical remains of the region's first occupants. Awareness of First Nations rich history and culture prior to colonization is increasingly important to non-First Nations and First Nations people alike, and the Town of Okotoks initiative to help facilitate that awareness is welcomed.

The Kainai, Piikani and Siksika First Nations are referred to collectively herein as the Blackfoot Confederacy or Blackfoot Confederacy Nations, although each has their own consultation department. The Stoney Nakoda also consists of three Nations, Bearspaw First Nation, Chiniki First Nation and Wesley First Nation. These three Bands are all served by the Stoney Nakoda Consultation Office. The Blackfoot Confederacy Nations, the Stoney Nakoda Nations and Tsuut'ina Nation collectively make up the Treaty 7 First

Nations. The Treaty 7 region includes the majority of lands in southern Alberta, generally south of what is now the City of Red Deer and was signed in 1877. Okotoks is in within the homeland and territory of these Nations. Except when necessary, we do not use “Treaty 7 Nations” and instead use “southern Alberta First Nations”. Referring to the Canadian Blackfoot Nations, the Stoney Nakoda Nations and the Tsuut’ina with this term is also problematic but it is perhaps less so than using Treaty 7 as a label to apply to the Nations. We note here that the *First Nations Culture and History Study of the Bible Camp* report, used Treaty 7 Nations. That was discussed at the time of that report and thought acceptable. Further discussion and consultation since that submission indicated that ‘southern Alberta First Nations’ is preferable.

The first non-First Nations people to establish permanent residency in the area now occupied by the Town of Okotoks did so after the on-set of Reserve Period, that is, that period following signing of Treaty 7 when southern Alberta Nations were largely confined to reserves and had limited opportunity to visit many parts of their collective territory as they had done for thousands of years prior to the arrival of Europeans. First Nations continued to be present and use the region around what is now Okotoks to obtain food, medicine and ceremonial resources, but that use and occupancy was severely restricted compared to the period prior to Treaty 7. As a result, the area ceased to factor significantly in the late 19th and early century histories of the Nations. However, the pre-Reserve period history of the region was and remains prominent in the culture, history and traditions of the First Nations.



Figure 1. Tsuut'ina women and children in river valley setting, possibly the Sheep River Valley, colourized postcard from early 1900s. Courtesy of Glenbow Museum Archives Photographs.



Figure 2. Left: Young Stoney men. Right: Piikani man (on right) and his son in family lodge, both photos from the early 1900s. Courtesy of Glenbow Museum Archives Photographs.

The Okotoks region has been the heartland of southern Alberta First Nations' home territory for more than 10,000 years and the land still bears the marks of its cultural, historical and economic importance. This report and its contents focus on before the signing of Treaty 7 and the role the area played and continues to play in the histories and cultures of the Blackfoot, Stoney Nakoda and Tsuut'ina. We often use the term "traditional" here when referring to resources commonly used by First Nations, but "traditional" should not be construed as something relegated to history. First Nations people continue to use resources that they have relied on for thousands of years and will continue to do so. Dietary and other resources that were a daily element in North American peoples lives for millennia are less commonly used today due to changes that occurred to Nations' territories and cultures after the arrival of Europeans and other non-North American people, but they are not just "traditional". Those resources and, perhaps more importantly, the land from which they came remain a fundamental part of First Nations' cultures and socioeconomics as well as history.

This report provides information on traditional resources and other cultural landscape elements within the Town that are important to First Nations' culture history. The intention is to provide an understanding of how land occupied by Town of Okotoks provides a sense of First Nations' pride of place and historical importance. It is the hope of Elders, experts and other First Nations people that participated in this project that it will help preserve and protect traditional and natural resources and landscape elements within Okotoks.

The protection of, and engagement with, cultural heritage places and spaces is seen as a fundamental human right (Bennoune 2016; Nakashima and Roue/UNESCO 2002). The link between identity, cultural heritage, and wellbeing shows "that reinforcement and preservation of living culture has helped to develop identity, sense of place and build self-esteem" (Lily 2016) in both First Peoples communities and non-Indigenous groups (Australian Productivity Commission Heritage Strategy cited in Lily 2016).

The following are used for defining “traditional” resources, sites and areas:

- Places where naturally occurring plants and animals are harvested for food, clothing, medicines, tools and other purposes.
- Places where various materials are collected for making tools, conducting ceremonies and other purposes.
- Ecological knowledge of habitats and sites critical to the survival of important animal and plant populations.
- Corridors and areas which animals use to migrate feed, mate, calve and winter.
- Habitation and economic practice sites, such as settlements, trading areas, and travel and trade routes.
- Spiritual, religious and sacred places such as ceremonial sites, rock paintings and burial locations.
- Special places of history, legend, myth and other accounts about specific places.

This categorization is not complete but covers a wide range of resources and places, and based on only cursory examination of this list, sites and features of the land in and around Okotoks are present that fall into each of the categories listed. The Sheep River Valley and its native plants, the Big Rock, the reported existence of rock art in or near the town, the Old North Trail and the native animal species in the Okotoks area illustrate the importance, relevance and sacredness of the area to First Nations.

Since initial European incursions onto the Northwest Plains, generations of people from many different cultures have been born within the collective territory of the Blackfoot, Stoney Nakoda and Tsuut’ina. Today both First Nations people and non-First Nations groups call this land home. They identify with the mountains, the plains, the rivers, and for most areas of the territory, the chinook wind - all which transcend cultural definitions and barriers. This collective territory of the First Nations has aided non-Indigenous people in the construction of their own cultural identity and well-being. In essence, this country is part of each person that resides here. Every resident and visitor has a duty to recognize

that First Nations were here 12,000 or more years before non-First Nations people and we all have the responsibility to conserve and protect the stories embedded within places and spaces, educate next generations about the significance of this region and its First Peoples, as well as protect the landscape itself. It is the overarching aim of this report that the information included here will assist the Town of Okotoks in acknowledging, monitoring, and protecting First Nation places and spaces within the Town. It is also hoped that this information will be disseminated to instil current and future Town citizens with knowledge and respect of the landscape and the culture of its original people.

This report is based primarily, but not exclusively, on First Nations Elders and historical experts and their accounts of their own history that goes back thousands of years or time immemorial. We also use and refer to work of non-First Nations writers who lived with, learned from and wrote about the Blackfoot, Stoney-Nakoda and Tsuut'ina. There is a range of issues and explanations in these works and some are reliable and others less so. A number of books are accounts written in the late 19th and early 20th centuries in particular have become widely read. Some of these books contain, for example, explanations of origins and migrations that are now known to be incorrect. Grinnell (1892) in an otherwise useful book, used information selectively to claim that the Blackfoot as a people moved onto the Plains from the north sometime in the Pre-Contact Period and he ignored or discounted Piikani people's accounts of their origins and history (Reeves and Peacock, 2001: 100). Other early European writers also discounted other First Nations own accounts of their own history or interpreted them in ways that fit the hypothesis those writers preferred. We have tried to use non-First Nations accounts critically and we relied more heavily on those that clearly took measures to present information and ideas that relied heavily on First Nations' peoples own accounts of culture and history, such as Hellson and Gadd (1974) and McClintock (1910).

The homeland of southern Alberta First Nations is not the same as a modern nation-state. The concept of "nation-state" such as Canada, France, Mexico, is a relatively recent phenomenon. The idea of a sovereign political unit with a distinct, bounded territory and

more or less homogenous cultural identity as a nation-state emerged in about the 15th century. By contrast “homeland” or “home territory” are much older than “nation-state” and not often firmly delineated unit. Homeland and territory are about origins, history and culture; a region that has sustained uncounted generations of people. The boundary of the collective territory shown in Figure 3 below is a convenience to illustrate the large area of southern Alberta First Nations. Over the time that people have been here, other ethnic groups such as the Ktunaxa whose homeland is in what is now southeastern British Columbia and the mountainous areas of western Montana, are known to have hunted bison in southern Alberta. Similarly, southern Alberta First Nations were present in southeastern British Columbia, northern Alberta and other regions. There is evidence that other First Nations came and went through southern Alberta. It seems likely that ancestors of the modern Navajo and Apache people migrated through southern Alberta from the north. It is however the southern Alberta Nations who have most been here for much or all of their known history.

The western edge of this homeland extends into British Columbia, the southern edge into what is now the northern part of Wyoming and northwestern corner of South Dakota, the eastern edge runs roughly north-south through eastern Saskatchewan, and the northern edge is on the north side of the North Saskatchewan River. The heartland of the territory is southern Alberta, the continental divide region between Alberta and British Columbia and northwestern Montana and western Saskatchewan.



Figure 3. This is an outline map of the collective territory of the Blackfoot, Stoney Nakoda and Tsuut'ina First Nations. As noted above, the boundary shown is not a political unit limit, but essentially encompasses the millennia-old homeland of these Nations.

Note: This image is solely intended to situate the Town of Okotoks within First Nations' homelands. There is no intention to formally delineate a traditional territory or territories and this image may not be used for purpose or legal arguments or positions. Further the image may not be reproduced without the permission of the Town of Okotoks and authors of this report.



Figure 4. Stoney women at camp near Calgary. Courtesy Glenbow Museum Archives Photographs.

The area in which Okotoks is situated is important for cultural and environmental reasons. These are discussed below, but among them are the habitat they provided for bison and other large mammals, the rich fescue grasslands and abundant water and widespread forested lands interspersed with open plains terrain. Okotoks is in an ecotone area, that is, a transition between two different biotic zones, in this case the Fescue Grasslands Natural Subregion on the east and the Foothills Parkland Natural Subregion on the west. Ecotones areas often have greater species diversity than the centre of a biotic zone, since they can contain plants and animals from both (Mirau 1990: 3, Odum 1971:157). While bison, for example, are mobile, they were more or less permanent present in this ecotone and benefited from both the nutritious fescue grasslands and the wooded areas in close proximity to one another. Okotoks is also within the chinook belt of southern Alberta, and the frequency of chinook winds in winter would have permitted bison and other animals

to more easily graze in the winter (Moodie and Ray 1976). These factors would have been important to human groups in the area and would have influenced both their warm and cold season presence in and near what is now Okotoks.

This TKLUA discusses history, traditions, cultural ecology, beliefs, socioeconomic systems and other elements of culture, emphasizing knowledge, history of land use and the historical arc of the Blackfoot, Tsuut'ina and Stoney Nakoda in the Okotoks area. As a result, there is an apparent emphasis on commonality and common socio-economic systems at least partly because the three Nations or groups of Nations occupied similar environmental settings. In modern western academic writing and literature, there is a tendency by some non-First Nations researchers, academics and the general public to think of and write First Nations cultures as quasi-homogenous. This tendency is sometimes referred to as pan-indigenism Parsons (2019). Pan-indigenism can directly or indirectly result in overly generalized and therefore incorrect accounts of the history, knowledge and cultures that are distinct linguistically, ethnically and spiritually even if their socio-economic systems are the same or similar.

We are aware of this potential issue with regard to this TKLUA and try to mitigate that and still provide a useful and meaningful account that properly informs and supports our recommendations. Having stated that, we encourage readers of this report to think critically about both its contents and recommendations herein. Further, we want to try to ensure that any actions that come as a result, either directly or indirectly, from this report, recognize that the beliefs, historical arcs and First Nations cultures discussed herein are from three distinct groups of First Nations peoples and their cultures.

We have included historical photos with this report, many of which were obtained from Glenbow Museum Archives. The Glenbow in Calgary has one of the most extensive collections of southern Alberta First Nations imagery from the beginnings of photography until the first two decades of the 20th century. The Glenbow Museum Archives Photographs collection is available online. (See citation for Glenbow Museum 2022 in the

References Cited Section at the end of this document). Many Glenbow Museum Archives photographs are also available online through the University of Calgary in its digital archives collection. (See citation for University of Calgary Digital Collections 2022 in the References Cited Section at the end of this document). Most of the Glenbow Museum Archives photos herein have an archives collection number on the image, and those images can be searched with that number. Where the number is not shown on the image, we cite it in the caption when it is available. We encourage readers to visit both web sites and examine images that provide information and insight into First Nations history. All of the historical imagery of First Nations people herein are either Blackfoot, Stoney-Nakoda or Tsuut'ina people. It is likely that many of the photos contained herein are posed or staged, that is, most are preplanned, even though many are intended to look candid. For example, First Nations people in the photos are sometimes shown in attire that they would not have worn on a daily basis. Nevertheless, the photos provide important insights into traditional lifeways and culture that were similar to life in the period before the arrival of Europeans and the Reserve Period. We searched for historical photos that were definitively taken in or near Okotoks but did not locate any. We do include some that may have been taken in the Sheep or Highwood River Valleys.

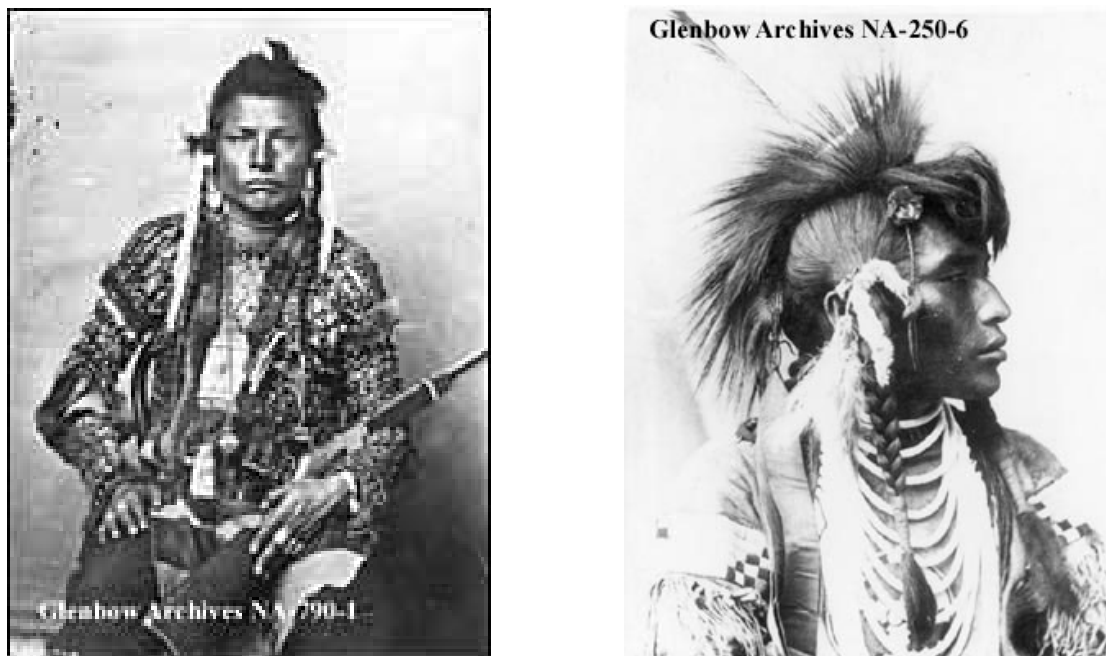


Figure 5. Bear Shield Blackfoot (left) 1878, Tsuut'ina man, name unknown (right) 1877. Courtesy Glenbow Museum Archives Photographs.

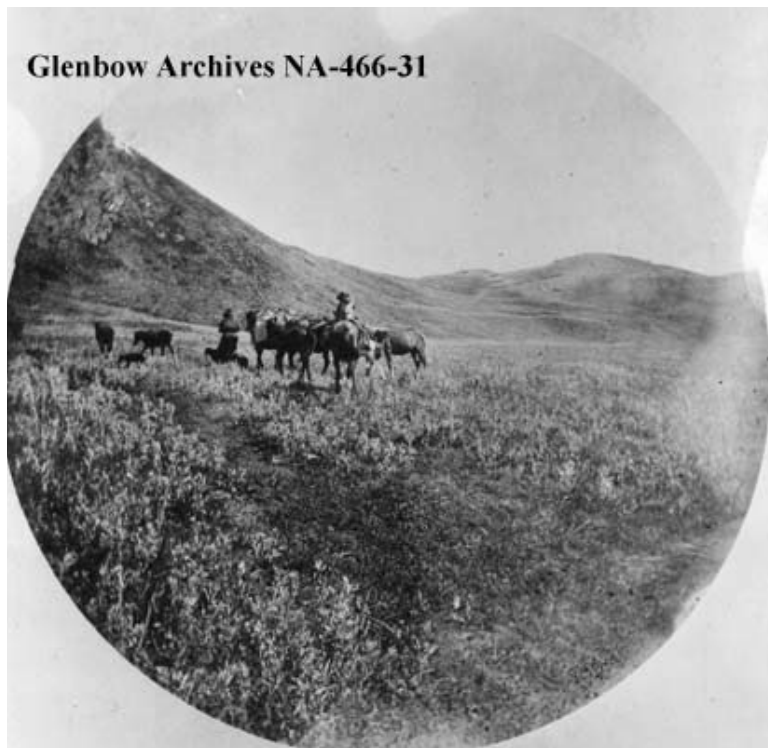


Figure 6. Stoney leaving camp near High River, 1890s. Courtesy Glenbow Museum Archives Photographs.

TRADITIONAL KNOWLEDGE AND LAND USE

The report begins by contextualizing First Nations land and resource use, and traditional knowledge within the collective territory of southern Alberta First Nations. Traditional knowledge and traditional uses are linked concepts and have been variously defined. The following definitions are considered appropriate and relevant here. According to the United Nations Environment Programme (UNEP) and the United Nations Educational, Scientific and Cultural Organizations (UNESCO):

“[Traditional knowledge] can be broadly defined as the knowledge that an Indigenous community accumulates over generations of living in a particular environment. This definition encompasses all forms of knowledge – technologies, know-how skills, practices and beliefs – that enable the community to achieve stable livelihoods in their environment”

and:

“[Indigenous people]...living in and from the richness and variety of complex ecosystems, have an understanding of the properties of plants and animals, the functioning of ecosystems and the techniques for using and managing them that is particular and...detailed” (Nakashima and Roue/UNESCO 2002).

Blackfoot Confederacy, Stoney Nakoda and Tsuut'ina Nations' general culture history are then discussed to illustrate the common lifeways of this region over many thousands of years. The methodology and results of the current TKLUA are then outlined. Recommendations made by Elders and the TKLUA team regarding the cultural heritage within Okotoks are presented. We include relevant points by the *Truth and Reconciliation Commission* (TRC) (2015) and the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP) (2007).

A mission statement from the Town of Okotoks states:

The Town of Okotoks fosters a culture of resiliency - where people, businesses, ideas and sense of community thrive. Grounded by the Sheep River valley and supported by thoughtful planning and design, a strong local economy and a vibrant civic culture, Okotoks offers exceptional quality of life at every stage of life. Respect for each other and the natural environment makes Okotoks home.

[and to] increase understanding of the issues various diverse Okotokian audiences have and adjust practices to ensure that Okotoks is known as a respectful and inclusive community.

The *United Nations Declaration on the Rights of Indigenous Peoples* supports the Okotoks mission statement in spirit and direction. While the entire UNDRIP is relevant, several articles of it are noted here as directly applicable to the TKLUA initiative, including the following:

Article 11.1

Indigenous peoples have the right to practice and revitalize their cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites, artifacts, designs, ceremonies, technologies and visual and performing arts and literature.

Article 15.1

Indigenous peoples have the right to the dignity and diversity of their cultures, traditions, histories and aspirations which shall be appropriately reflected in education and public information.

Article 24.1

Indigenous peoples have the right to their traditional medicines and to maintain their health practices, including conservation of their vital medicinal plants, animals and minerals...

Article 25.1

Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands [and] territories... and to uphold their responsibilities to future generations in this regard.

Article 31.1

Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences.... They also have the right to maintain, control, protect and develop their intellectual property over ...cultural heritage, traditional knowledge, and traditional cultural expressions.

As noted above, we focus on the region around Okotoks, but the greater culture area associated with culture history and knowledge outlined here includes the respective/

collective territories of Nations prior to the signing of Treaty 7 and the implementation of the Reserve System. The Reserve system, in conjunction with the implementation of the 1876 Indian Act - which saw First Nations people made wards of the State - and residential schools severely and fundamentally impacted First Nations lifeways. The TRC states:

For over a century, the central goals of Canada's Aboriginal policy were to eliminate Aboriginal governments; ignore Aboriginal rights; terminate the Treaties; and, through a process of assimilation, cause Aboriginal peoples to cease to exist as distinct legal, social, cultural, religious, and racial entities in Canada.

The establishment and operation of residential schools were a central element of this policy, which can best be described as "cultural genocide... The Canadian government pursued this policy of cultural genocide because it wished to divest itself of its legal and financial obligations to Aboriginal people and gain control over their land and resources. If every Aboriginal person had been "absorbed into the body politic," there would be no reserves, no treaties, and no Aboriginal rights...Residential schools were created for the purpose of separating Aboriginal children from their families, in order to minimize and weaken family ties and cultural linkages, and to indoctrinate children into a new culture (TRC 2015: 8).

The Reserve period is referred to here as the period when First Nations were confined to Reserves. Life on Reserves did not result in the abrupt end to traditional uses or practices in spite of harsh circumstances. Traditional knowledge and uses, customs and other elements of the long-lived cultures of this region have survived and continue to thrive thanks to the efforts of First Nations people that were determined to preserve their history and culture in spite of the concerted efforts at assimilation and concomitant colonial policies (Mirau and First Rider 2009).

Southern Alberta First Nations accept and believe their collective territory was provided to them to occupy and care for (Eli 2011), and landscape cannot be separated from people as the Earth, the environment, the land, water, and flora and fauna, including humans, are a single whole that is inseparable (Little Bear 2000). The sacredness and centrality of environment is an inherent element of those Nations' reality. Former Stoney Nakoda Chief John Snow (1977: 4) puts it eloquently and his statement is relevant to all southern Alberta Nations:

Our forefathers were a proud people because they knew they had been selected by the Creator to receive a precious gift of special understanding [of the land and its resources] and they handed that gift down to [all their descendants] as a sacred trust. We lived a nomadic way of life, hunting, fishing and gathering from the abundance of this good land. There were literally millions of buffalo roaming on the prairies, along the foothills and even into the Rocky Mountains.... The land was vast, rich and beautiful in abundant resources. Our Mother Earth called us from the prairies, the valleys, the mountainous areas, the lakes, the rivers and springs. "Come my children, anyone who is hungry, come and eat from the fruits and gather from the abundance of this land. Come everyone who thirsts, come and drink pure spring waters that are especially provided for you. Everywhere the spirits of all living things were alive. We talked to the rocks, the streams, the trees, the plants, the herbs and all nature's creations. We called the animals our brothers. They understood our language, we understood theirs. Sometimes they talked to us in dreams and visions. At times they revealed important events or visited us on our vision quests to the mountaintops. Truly we were part of and related to the universe and these animals were a very special part of the Great Spirit's creation.

The Blackfoot Gallery Committee (2013: 16-17) puts it similarly to Chief Snow:

The Creator...made all living things equal; humans were not given the right to rule over or exploit the rest of nature. We recognize plants, animals, rocks as other living beings, who are different from us, but also our equals.

Kainai Nation Elder David Striped Wolf, who participated in the Okotoks TKLUA upheld these values and precepts. He said (pers. comm, 2021):

Our way is to uphold and respect all creation. We use and consume plants, animals and all other parts of creation. We thank all and honour them for allowing us to use them. I thank the plants that I use and I thank the birds and animals for honouring me with their presence when I see them. When I talk to the magpies, they know and understand what I am saying. We humans are a small part of the same world and reality they are. We cannot just use them and not acknowledge their sacrifice and that they are what sustains us and permits us to survive. When an animal dies to feed us we need to thank that animal for its sacrifice and honour that animal by ensuring the remainder of its kin can thrive. Our survival and that of the animal depends on this.

Sometime prior to 1900 and in practical terms, Piikani Chief Brings-Down-The-Sun told this to Walter McClintock (McClintock 1910: 386):

"We pitch our tipis in this grove of cottonwoods every summer to gather sarvis [saskatoon] berries for our use when the snows are deep. You will find many kinds of berries on all sides. You can eat them now or gather and dry them for your winter supply just as we do. I ask, however, that you

will be careful not to injure the trees or break the branches of the berry bushes. I make this request because I am looking ahead for my tribe. I am anxious to preserve these big trees and berry bushes for our children. I am accustomed to admonish my people in this manner, warning them not to be short sighted. [Others] once had many large trees along their river, but they cut them down for firewood. Now their country is bare and they have few berries. I am continually advising my people not to cut down trees from along the river, but to haul their wood from the mountains. They have followed my advice and we still have our big leaf trees (cottonwoods)... the spear leaf trees (balsam poplar)...,the round leaf trees (trembling aspen)...and brush sticks (willows)” .

The understanding and conceptualization of reality in these statements, among many other things, illustrates the fundamental connection between humans, the land they are in and environment that is sustained both by the lands and humans within it. In the commonly held worldview of the Stoney Nakoda, Blackfoot and Tsuut’ina Nations, this understanding emphasizes the need to preserve and protect remaining natural areas and the resources therein. These quotes also serve to illustrate that “resources” in the First Nation’s worldview are not something to be used or exploited, but to be honoured, protected, sustained and regarded as having essentially equal status to humans. Similarly, First Nations do not separate the sacred from everyday life or the secular. As stated by the late Elder Andy Black Water (pers. comm. 2009):

“We believe that these [traditional use and sacred] areas still have a presence and therefore should not be disturbed, so that these areas shall remain for the future generations. We as a people have reached a time where it is very difficult in that many different factors have come into play in our lives [which detracted from our traditional ways]. We are [however] now trusting our traditional ways once more...These are the things that we are taught today. [Modern life and non-traditional ways have] changed that

[which was]... but the rivers and hills and the medicinal plants that have been given to us sustain life and I don't think it has changed all that much, these sacred things [such as bundles] that we own came from these areas. People [identify] particular areas by knowing it is where someone received a gift or where something sacred was transferred to that person. We were given a mysterious power from these sites [and we need to maintain those sites].

We only ask [that non-First Nations people] respect our ways the same way you respect your sacred ways. We respect our lands [as] sacred lands. We have our spirit beings just as the white people have theirs and we do not expose our sacred ways too much [and] there are things that we revere....Our beliefs and religion that we cannot share with everyone is saved for the future generations that are going to take part or become a part of the sacred ways. We are protecting these ways for them. That is why we like to be involved in what is happening around us to protect our sacred way of life and the land in which that life exists. The [larger culture] has developed much of our lands for monetary wealth and have disturbed much of the tracts that were left for us to protect...that is [why we believe] we are right about what we say [to save and protect] the Traditional Lands that we know [remain]”.

This statement indicates the fundamental importance of land, its natural resources and the need for its protection.

The idea and legal status of natural features such as rivers and other natural features to have specific rights of protection and preservation not dissimilar to human rights is gaining momentum in the modern world at least partly due to that long held worldview of Indigenous peoples. In 2010, the Ktunaxa First Nation issued the Qat'muk Declaration which sought to provide full legal protection to part of their traditional territory, the Jumbo

Valley and surrounding area in the Purcell Mountains of southeastern British Columbia. Jumbo Valley is the place, that according to the Ktunaxa, is where the Grizzly Bear Spirit was born. The impetus to affirm and issue the Qat'muk Declaration was to help prevent the development a major ski resort in the valley that had received British Columbia government to proceed. After a long legal battle, the development was not approved, and the area will be protected and preserved. The Ktunaxa Nation was successful in its battle and with the help of Qat'muk Declaration. Federal and provincial government and other non-governmental conservation groups supported the Ktunaxa initiative. Similar protection and preservation status has recently been declared for Magpie River in Quebec largely due to traditions of, and its cultural importance to, the regional Innu people. This protection was due to efforts of Innu Council of Ekuannistshit and Quebec Regional Municipality of Minganie. Similar protections have been issued in other countries due to the initiatives of Indigenous Peoples based on their heritage and worldview similar to the those expressed by John Snow, the Blackfoot Gallery Committee and Andy Black Water, among many other southern Alberta First Nations people.

These examples illustrate the real influence and role of First Nations in working to protect the natural areas in their territories. The views held by First Nations are being felt and increasingly appreciated by non-Indigenous people. The examples also demonstrate at least the beginnings of more widespread acceptance of First Nations conceptions of the interconnectedness of all natural elements and human cultures.



Figure 7. Stoney man with family (left), Young Stoney men in lodge (right). Both photos ca. 1904. Courtesy Glenbow Museum Archives Photographs.

FIRST NATIONS HISTORY

This section presents an overview of First Nations history and socioeconomics considered relevant to this report, but it is necessarily general. All southern Alberta Nations have a long history in this area. We therefore provide a general collective First Nations historical narrative. As noted elsewhere in this report, all southern Alberta First Nations shared a territory, but there are extensive and highly significant cultural, linguistic and historical differences between Nations. Given that this TKLUA considers a relatively small area of the greater territories of these Nations, and that the Nations' own accounts of their use and knowledge of the area share common elements, we note important cultural differences between them only when those differences are relevant to the report's conclusions and recommendations.

The deep time history presented here arbitrarily starts at about 12,000 years ago. We firmly and unequivocally agree with the premise that humans could have been present in this area before that date; 12,000 years ago represents deep time and spans all the

Holocene geological epoch and the very end of the Pleistocene (Ice Age) Epoch. Epoch, as that term is used here in its geological definition, is: “A division of a larger unit of time corresponding generally but not exclusively on a distinct series in chronostratigraphy”. As such “epoch” is a term from western geological science and its view of time.

Notwithstanding that point, we want to emphasize three fundamental facts.

Firstly, First Nations in North America state that they have been here “since time immemorial”. That phrase can be understood to mean “beyond memory”. That is, not necessarily an infinite period, but for a very long time, much longer than non-First Nations have been here. Modern western technology and philosophical approaches, as illustrated above in the definition of “epoch” often emphasize quantification and thus refer to something as occurring, for example, 12,000 years ago. The number of years in this sense is similar one often hears on birthdays: “years is just a number” and is not especially relevant. Deep time measurement is similar to First Nations. A statement of the number of years is less relevant than the view that flux, including the passage of time always is and has always been occurring, and so “time immemorial” is a vast enough quantity that its specific measurement is not particularly relevant to their historical or cultural trajectory, but that trajectory includes accounts of their origin and cultural development through time to the present.

Secondly, First Nations have historical narratives that go back many thousands of years, much longer, for example, than most present-day Canadians of European descent and other Old World cultures. This is the result of careful preservation of history and historical events passed down in oral histories or traditions and other forms. An example of another form is the winter count that was used by most if not all Northern Plains cultures. A winter count was a tool to help people keep track of important events and, as a mnemonic device, help preserve history. A winter count is the depiction of important events typically painted on a bison hide using pictographs, or pictorial writing, not dissimilar to hieroglyphic symbols used for writing by many ancient cultures. This documentary

evidence recorded significant events over many decades, and when a hide was full a new one would be started. In long winter counts, if a hide on which events were being recorded was wearing out, symbols were copied onto a new hide and the count went on. The events depicted or recorded on the winter count were generally agreed upon by a group's Elders and then recorded. As a record of history, the winter count reminded people of who they were, where they had come from and documented important events in their lives. And it is likely winter counts had been produced for thousands of years prior to the arrival of Europeans. Winter counts were not the work of an individual, but a group of knowledge people in a community. That helped ensure the record was an accurate account of historical events.

Thirdly, there is reliable evidence, as evidence is construed in modern non-First Nations history that humans have been in this area for at least 12,000 years, but archaeology and various dating techniques used to assign specific times in years to sites is still an evolving technique and over the last three or more decades a significant number of new sites have been discovered that push the presence of humans in North America back much further than 12,000 years. The term "time immemorial" is therefore relevant and applicable to First Nations history and culture.



Figure 8. Winter count from after the arrival of Europeans, note the presence of horses, but this is a faithful record of important historical events spanning many decades.

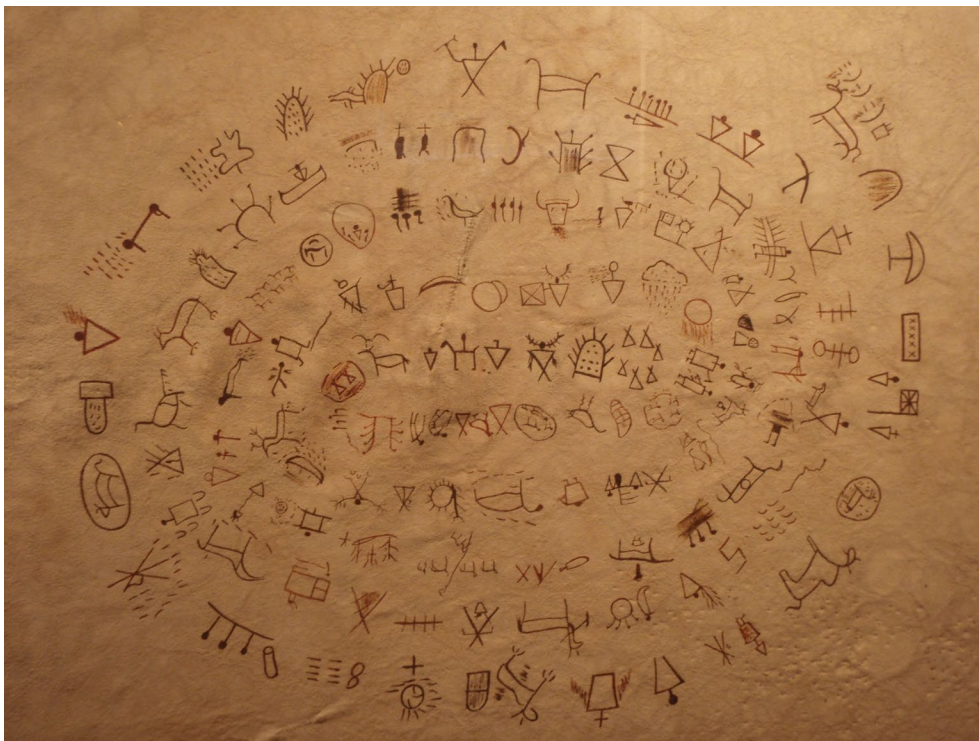


Figure 9. Close up of a winter count at Head-Smashed-In Buffalo Jump Interpretative Centre. This winter count covers the period from 1764 to 1879 and is on bison hide.

CULTRE HISTORY OVERVIEW

The record of the presence of humans in what is the Okotoks area goes back many thousands of years. The density of human population in southern Alberta anytime prior to the beginning of the 20th century was low compared to modern population densities, however, there is little doubt that between 12,000 years ago and the arrival of Europeans in late 18th century in this region, millions of people lived and died within the Great Plains.

The economy of the indigenous population in this area and elsewhere on the Northern Great Plains of North America was based on the acquisition of naturally occurring resources. This economic system meant that humans had to clearly understand the environment and maximize use of available natural resources, while ensuring those resources were sustained for subsequent generations. Without going into anthropological theory in detail, human cultures and economies change based on external and internal pressures and opportunities. The Plains of southern Alberta presented a rich, though highly seasonal, environment. The stable economic system of this area was based on the fundamental fact that natural environment provided a rich resource base for First Nations and there was no need to change economies based on pressures within those cultures or external pressures from significant environmental change. Although the climate and environment of this region vacillated between extended drier and warmer and colder periods, the general environment has remained broadly similar since the end of the last Ice Age and so just as few internal pressures for change occurred and the comparatively minor external environmental changes were adapted to by the resilient and inherently flexible First Nations' socioeconomic system. The environment sustained the cultural system and provided the parameters within which culture operated. Detailed knowledge of the environment by the humans was paramount to survival of culture.

This inference of close relationship between environment and all cultural systems is based on anthropological theories of environmental possibilism and cultural ecology originally developed by noted anthropologists Franz Boas, Robert Lowie, Alfred Kroeber and Julian Steward among others (as cited in Kormondy and Brown 1998). These early

anthropologists all spent time in western North America living with First Nations people and much modern anthropological thought about the Plains of North America and other places on the planet is a result of the anthropological contributions these individuals made based on their experiences with western North American First Nations, including southern Alberta First Nations. Briefly stated, environmental possibilism is the view that cultures adapt based on the possibilities and opportunities an environment provides. Those possibilities are mediated by a variety of factors, such as competing cultures and internal cultural dynamics. Most of the ethnographical and ethnological information reviewed during the course of this project has been framed within the general theory of environmental possibilism and the related idea of cultural ecology, but it is critical to note that terms like “environmental possibilism” is just an anthropological label for what First Nations regarded as everyday life and collective cultural choices. Concepts related to environmental possibilism, but specific to Indigenous cultures are bio-culturalism and a derivative, bio-cultural heritage. Bio-cultural heritage is:

Knowledge, innovations and practices of Indigenous and local communities which are collectively held and inextricably linked to traditional resources and territories, local economies, the diversity of genes, varieties, species and ecosystems, cultural and spiritual values and customary laws shaped within the socio-ecological context of communities (Swiderska 2006: 3 cited in Provost 2020: 15).

As stated, bio-culturalism is more holistic and specific than environmental possibilism in that it clearly links the spiritual, or sacred, with the environment and emphasizes the holistic, inclusive worldview of First Nations and Indigenous cultures. This stand is essentially in opposition to reductionist worldview of the “west” with its emphasis on quantification, deconstruction and distinction. The idea of a bio-cultural heritage is that traditional resources and economies are not distinct from ecosystems or the elements that make up ecosystems and that all aspects of culture can and do influence the ecosystem and are influenced by it. Humans do not use the environment, but are part of

it, and neither humans, their culture or historical trajectory are separate from the environment. The bio-cultural approach is inherent herein and informs several of the recommendations in this report.

The economy of northern Great Plains First Nations for thousands of years prior to the arrival of Europeans was focused though not exclusively on bison (Wilson 1992, Oetelaar, 2016). Prior to the arrival of Europeans, bison on the Great Plains composed one of, if not the, richest large animal biomasses on the planet. The bison was therefore logically central to the economy of the people the plains including southern Alberta. This reliance on bison and the seasonal variability of other natural resources meant that First Nations were necessarily mobile and used large territories. We use the terms buffalo and bison interchangeably herein. First Nations and non-First Nations people use “buffalo” commonly to refer to the modern and now extinct forms of bison, animals that belong to the genus “*Bison*”.

Bison, in their natural state, are gregarious animals that often, but not always, move from one place to another during the course of the annual cycle. Regardless of any pattern of seasonal movement, bison are mobile and have capacity to move relatively long distances as needed for their survival. Humans that relied on bison needed to be similarly mobile. Human movement on the northern plains was not constant from one period to another, and adaptive practices and technology developed, such as the production of pemmican, that permitted longer term occupation of areas, particularly during the cold season. Notwithstanding that, humans did need to be where bison were for at least some of the year. As Oetelaar (2008: 3) states:

...survival of [First Nations people] depends on an intimate knowledge of the ecological relationships within the biophysical environment. Successful adaptation to the grasslands of North America [including southern Alberta] would logically entail the development of appropriate strategies to harvest bison, the single most abundant [animal] resource available in this

ecozone...thus the seasonal movement of humans across the landscape is predicated on the habits and mobility of the bison.

Despite the reliance on bison, people required many other resources to live and to sustain their culture. An example is the need to obtain other materials such as wood for their lodges. An equally significant need was the requirement to congregate in large groups for some period during the year, to renew contacts, form alliances, and build relationships. These latter needs are equally important in term of cultural survival to the food quest. As a result of this constellation of needs common to all human societies, northern Plains people including those of southern Alberta practiced what has commonly been termed a seasonal round. In order to understand cultures as whole requires examining its constituent parts. This study is focused on knowledge and land use and therefore it is necessary to examine the relevant socio-economic system. And the seasonal round is a critical element of that system. The specific seasonal rounds of the Nations involved in this assessment varied in detail, however they were similar, and this summary is general, but with a focus on the relative importance of the area in which the Town of Okotoks is situated in an ecotonal area between the open grasslands to the east and foothills parkland and mountains to the west.



Figure 10. Northern Plains bison and hunter, British Museum, No. AM2006, Drg215. The artist is unknown, but probably dates to ca. 1890 by a “self-taught native artist”. The late Hugh Dempsey in a note dated 1998 indicated the hunter depicted may have been Blackfoot based on his hair and clothing, Courtesy of British Museum (2021).

THE SEASONAL ROUND

A seasonal round is the movement of people to certain areas at certain times of the year to obtain the resources needed. As is the case with all cultures, the economy, that is, the constellation of practices and activities that people employed to obtain the necessities of survival, both personal and cultural, is a basic constituent of culture. All economies can be complex, multi-faceted and are particularly so in the modern era, but at their base the acquisition of food and shelter sufficient to allow people to live is paramount. For southern Alberta First Nations acquiring resources via a mobile, that is, seasonal round, practice was the economic base. Knowledge of ecology and environment and the acquisition of resources was grounded in the idea of sustainability, that is, acquiring what is necessary to sustain personal and cultural life, but also ensuring survival and sustainability of resources. The primary elements of this knowledge include, but are not limited to:

- The distribution, location and density of plants and how local climate and seasonal conditions impact distribution, location and population of specific plants used by First Nations, including for dietary, medicinal and ceremonial purposes.
- The growth cycle and timing of plants and how that cycle varied from place to place and from environment to environment were part of seasonal round decisions. For example, many plants occur widely in a territory and have variable emergence and maturation cycles depending upon their location in that territory. Knowledge of how plants responded to harvesting operations in a given area was also essential.
- The productivity of any place biological resources occurred, for example, knowledge of climate and weather impacted reproduction and productivity of any and all resources, and how resources were influenced and impact by other non-human entities that used those resources and the impacts and roles of non-human competitors.
- Knowledge of animal behaviours and migratory/movement patterns, and how weather, climate and random environmental factors impacted behaviours.
- Knowledge of how biological resources responded to random or irregular external factors such as changes in non-human predator density or behaviour, floods, fires, extreme weather events.
- Knowledge of activities or practices that could mitigate the impact of those unpredictable or random factors and help sustain or replenish the resource.
- General knowledge of water resources, changes in water conditions during the annual cycle of flooding and low water timing of rivers streams and other water resources, usable fording locations for major rivers.
- Astronomical knowledge relevant to the annual and/or seasonal cycle, such as, but not limited to, equinoxes, solstices, rising and setting of certain stars and patterns of planet movement. First Nations were keen and capable observers and their knowledge of astronomical behaviour and phenomena were important to ensure cultural continuity. For example, environmental factors including astronomical data provided widely dispersed groups with a universal calendar that was used to permit people to start moving toward designated gathering spots for

exchange of information, to solidify cultural ties, to form alliances and marriages, among many other elements.

Evaluation and consideration of these and other factors allowed people and groups to make decisions about the specifics of the seasonal round and how to distribute themselves across the landscape to ensure cultural continuity. As noted, the seasonal round as practiced by individual First Nations and by individual groups such as clans varied in detail but the basic aspects in the seasonal environment of the northern Great Plains and adjacent foothills and mountain areas were similar from group to group and nation to nation. A general summary of the primary aspects by season follows.

Winter

Winter on the northern Great Plains varies in terms of its intensity and duration from place to place, but the dominant characteristics are temperatures cold enough that humans needed adequate shelters, clothing, food and health/medicinal supplies to get through five to seven months of limited resources and often difficult travel. Wintering villages were therefore located in areas with sufficient fuel for fires to sustain warmth, availability of fresh water and in sheltered areas to provide protection from harsh winter winds and storms. For the most part, this meant habitation sites in river valleys that contained significant riparian or valley tree cover, along with woody brush species such as chokecherry and other berry bushes, willow and other vegetation to provide material for the production of essential tools and other material culture. The favoured wintering areas were relatively close to where bison tended to gather in the fall and winter, so that fall and winter hunting activities could obtain enough meat, hides and other resources for survival. Winter habitation sites were often large, but individual lodges would be spread along river valleys for several kilometres so that each lodge could utilize resources near the lodges and not deplete any area of all its plant and other resources.

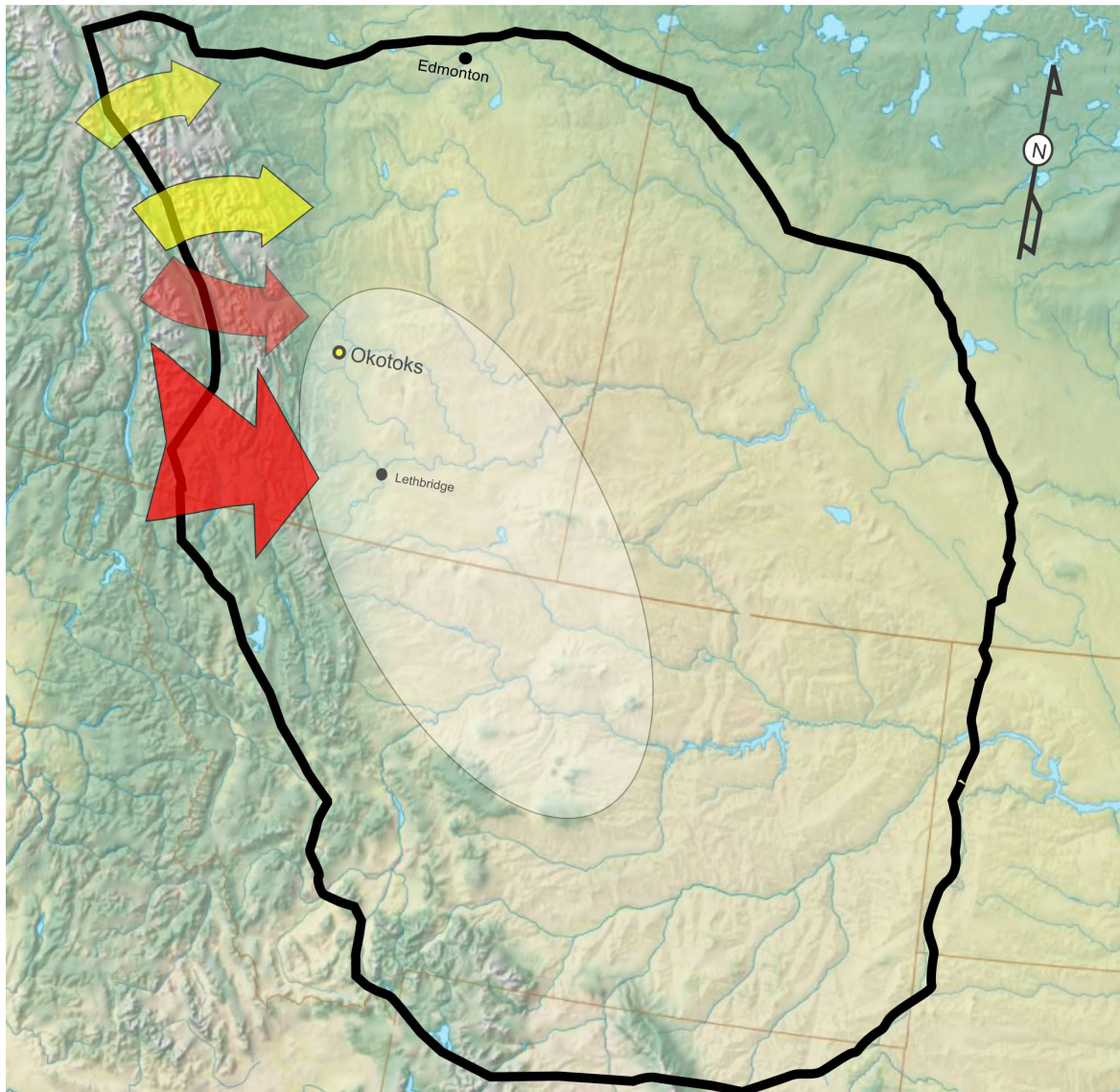


Figure 11. This map shows the pattern of chinook winds in southern Alberta, an important factor in the winter distribution of bison on the western prairies and foothills. Size and colour of arrows represent relative intensity and frequency of chinooks in this region. This pattern was an important factor in the location of winter camps. Map derived from Natural Regions Committee (2006).

The Sheep and Highwood River valleys were important wintering sites and according to Elders Andy Blackwater, David Striped Wolf, Frank Weasel Head and others. These river valleys had plentiful wood and other plant resources. Probably more importantly, both rivers are in the chinook belt of southwestern Alberta (Figure 11) and provided good wintering habit for bison. Bison in southern Alberta tended to move toward and into the

foothills as winter approached, especially to areas such as the region around Okotoks and south where occasional to frequent chinooks that cleared or reduced snow cover from important grazing lands. (Blackfoot Gallery Committee 2013, Quigg 1978: 53-54). The FM Buffalo Jump is a large bison kill site that was utilized year-round located approximately 15 km northeast of Okotoks and it is likely there were additional bison hunting locations used in winter closer to where the Town is located. Cooper (2008) found that major bison acquisition sites tend to be most dense in the foothills and rolling prairie of the northwestern plains, supporting the knowledge and oral histories from First Nations.

Winter was also a time for production and repair of necessities of life including clothing, tools, ceremonial objects, and others such as accessories and decorative items and therefore proximity to the required materials such as chokecherry wood was important.



Figure 12. Winter camp lodge, note the wood piled just outside the door to the tipi. Photo dates to the late 19th century. Courtesy of Glenbow Museum Archives Photographs.



Glenbow Archives NA-1122-10

Figure 13. Stoney men in winter dress. This photo taken in the late 19th century. Clearly some of this clothing is made from European fabric, but the style of winter dress was similar to that from the Pre-Contact Period, that is the time before the arrival of Europeans. Note the fur mittens worn by the man on the right. Courtesy of Glenbow Museum Archives Photographs.



Glenbow Archives NA-1020-60

Figure 14. Photo from the late 19th century, winter. Courtesy of Glenbow Museum Archives Photographs.



Glenbow Archives NC-39-170

Figure 15. Moving camp in winter was not frequent, but increased mobility with the horse-pulled travois allowed more winter travel than the pre-horse period. Although moving camp in winter could be difficult, pulling travois by dog or horse, when snow cover was not excessively deep travel was less difficult than other seasons. Frequent winter chinooks reducing snow depth was an important factor in winter movement of camps and hunting expeditions. Hunting bison in winter was aided by the ability to haul heavier loads by travois. Wintering in the chinook belt of southwestern Alberta, including in the Sheep River Valley was a common practice dating back thousands of years. Courtesy of Glenbow Museum Archives Photographs.

Spring

As winter receded, people began preparing to move from wintering areas. The timing of movement was critical, since toward the end of winter food and other supplies would run low and it was important to replenish supplies. It was also a time when bison would move onto the grasslands to graze on highly nutritious grasses as they emerged. Spring does not arrive at the same time in all parts of the territory. On the western Canadian plains, for example, open, snow-free grazing tends to occur first in the southeast part of Alberta, generally east of the Cypress Hills. People who wintered relatively close to that area

would start to move toward what is now the Medicine Hat area when the time was deemed to be right. First Nations made use of their knowledge of animal behaviour and plant phenology to help determine when bison would arrive in a given area to graze in the spring and would be in prime spring condition to hunt. Southern Alberta Nations commonly used the spring blooming of buffalo bean (*Thermopsis rhombifolia*), as a gauge of when bison would arrive. The buffalo bean, as it is commonly known in southern Alberta is named after its role as an indicator of the appropriate time for undertaking a spring bison hunt. Buffalo bean is ubiquitous in southern Alberta, including the Okotoks area and it is likely that it would have been used as an indicator plant to signal the timing of the spring bison hunt for people wintering along the Sheep River in or near what is now Okotoks.



Figure 16. Buffalo bean in bloom.



Figure 17. Bison would move to good early grazing in spring. In southern Alberta, grasses typically emerge earliest southeastern Alberta and southwestern Saskatchewan. This area was an important part of the warm part of the seasonal round. Photo: Glenn 2020, Western Producer 2020.



Figure 18. Blackfoot family moving camp. Dress and vegetation suggest this was a spring photo. Courtesy of Glenbow Museum Archives Photographs.



Figure 19. Bear tipi in late spring, early 20th century, Courtesy of Glenbow Museum Archives.

Summer

Summer was the time of plenty on the northern Plains and it was important to acquire necessary resources when they were both readily available and easily accessible. A broad range of important plants were harvested in summer as they became available including saskatoons (*Amelanchier alnifolia*) and goose berries (*Ribes oxycanthoides*) arguably the most important food berry plants, and root plants such as prairie turnip (*Psoralea esculenta*) the most important root crop used for food, arrowleaf balsamroot (*Balsamorhiza sagittata*) used for both food and medicine, and other plants such as sweetgrass, various willows, wild mint and chokecherries. This report includes a brief list of plants that occur naturally in the Okotoks region and that were and continue to be important resources for First Nations people. This list includes the many common uses of these plants. Summer was also the time when large scale gatherings occurred and celebrations and important religious rituals occurred. The summer solstice was an important time for southern Alberta Nations. These gatherings occurred in specific areas

and at specific times. The gatherings were social and celebratory, but critical to cultural continuity and survival. Exchange of information regarding environmental conditions and situations were critical to ensure people knew where resources could be obtained and what areas were not as productive as normal. Then as now, weather and climate conditions varied from one place in a territory to another, and mobile resources, especially large herds of bison, would move as grazing areas were depleted. Modern research of free roaming bison indicates that they would also move in response to non-human predators, primarily wolves if they were pressured to do so and, of course, in response to wildfire and other environmental parameters. Summer was also a time for clan leaders and chiefs to meet. Similarly, societies that had social, ceremonial and important societal roles, such as peacekeeping and large-scale bison hunt organization required congregation to carry out necessary planning and discussion. As mentioned earlier the large-scale summer gatherings were also important for forming clan and other alliances and for identifying marriage partners.

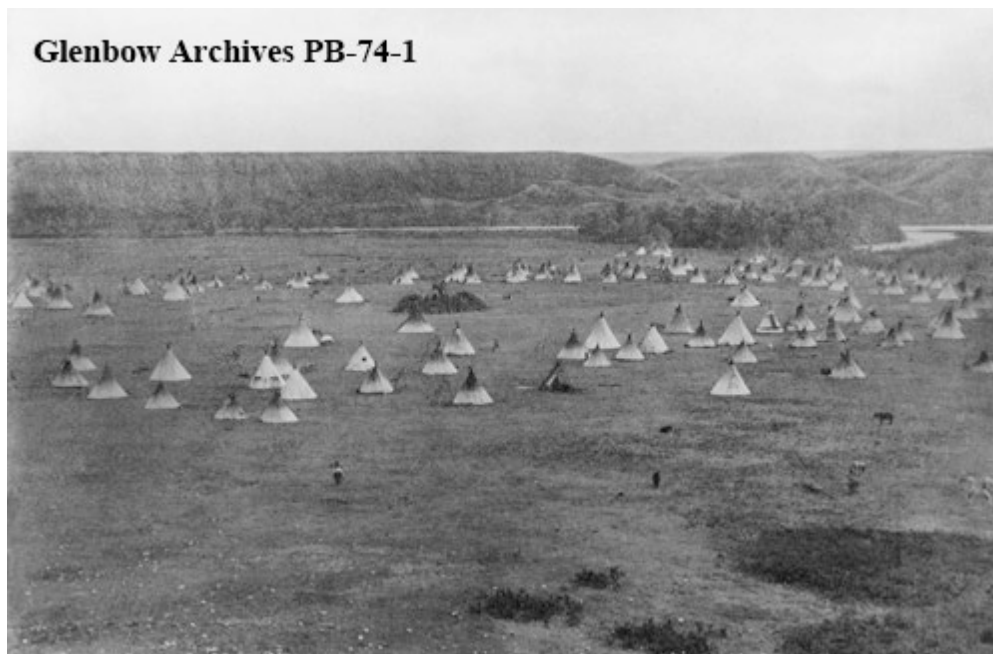


Figure 20. A Blackfoot Sundance camp in the 19th century. Large gatherings were important summer events that facilitated a number of socio-economic, religious and cultural continuity activities. Many hundreds to thousands of people gathered at these annual events and such gatherings go back thousands of years. The Sundance remains an important annual event for many Plains Nations. Courtesy of Glenbow Museum Archives Photographs.



Figure 21. Blackfoot woman performing normal summer chores in summer shelter, young girl is carrying a puppy, meat drying above woman. Courtesy of Walter McClintock, Beinecke Rare Book and Manuscript Library, WA MSS S-1175.



Glenbow Archives NA-1700-35



Glenbow Archives NA-1020-55

Figure 22. Left: Blackfoot girl in front of her summer play lodge. Right: Large Tsuut'ina summer camp, both photos late 1890s. Courtesy of Glenbow Museum Archives Photographs.

Autumn

Autumn was an important time to ensure that people had the food stores, shelter and other preparations completed to survive through the cold season. Autumn was time to move toward wintering grounds. A wide range of plant resources including both food, medicinal and ceremonial plants were gathered in the fall, particularly those that could be dried or otherwise prepared to preserve them for winter. Two other notable essentials were required and were acquired in fall, sufficient meat and where necessary tipi poles and hides for both shelter and for winter clothing. Wood poles, primarily lodgepole pine were essential for tipis and needed to be replaced after a few years of use. People on the northern plains had to go where lodge poles were plentiful and so the Cypress Hills upland and areas of the foothills and mountain valleys that supported lodge pole pine were part of autumn portion of the seasonal round. While bison were hunted all year as necessary, large-scale hunts such as occurred at Head-Smashed-In Buffalo Jump, FM Buffalo kill site northeast of Okotoks and Women's Buffalo Jump near modern day Cayley occurred primarily in the fall. It is not a coincidence that there is a concentration of large-scale bison hunting sites on the western prairies that were important for their autumn bison acquisition events.



Figure 23. Women's Buffalo Jump, near Cayley Alberta, a major fall bison hunting site, most likely used mostly in fall. Courtesy of Heritage Resources Management Information System, Alberta Culture and Status of Women.



Figure 24. Pre-horse period fall bison drive (Foster 2015).

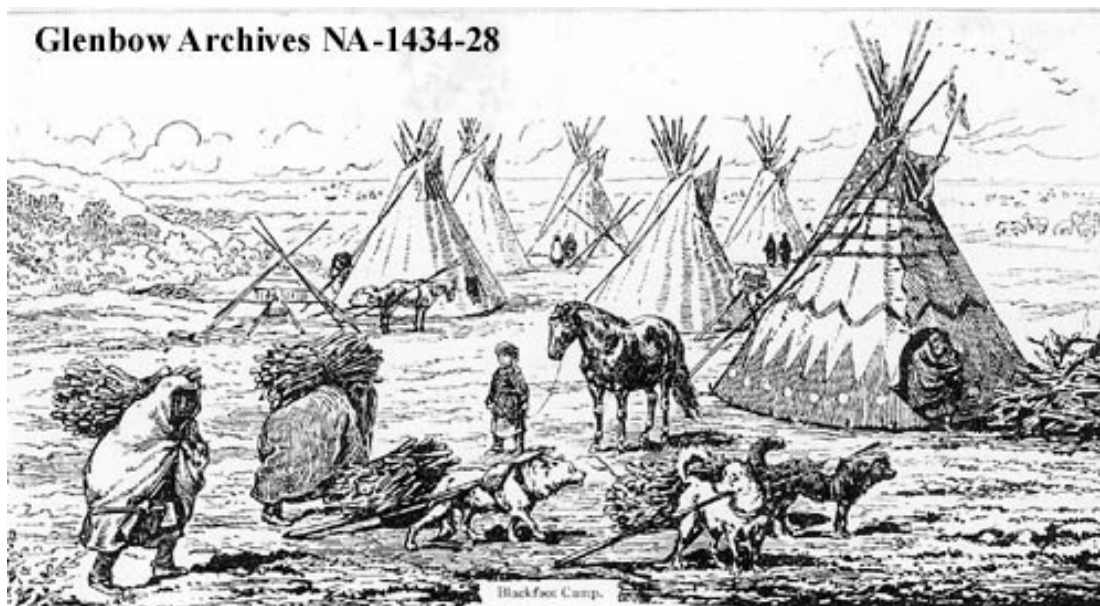


Figure 25. Gathering wood at Blackfoot camp, note dog travois. Although not specified, it is likely a fall season scene based on dress depicted and wood gathering activity. Original drawing ca. 1875. Courtesy of Glenbow Museum Archives Photographs.



Figure 26. Stoney woman tanning hide. Hide preparation was an important fall activity. Courtesy of Glenbow Museum Archives Photographs.



Figure 27. Stoney family in fall, preparing to move camp from postcard photo, early 20th century. Courtesy of Glenbow Museum Archives Photographs.

Historical evidence indicated that bison remained on the prairies in winter where there was sufficient grass. Bison do not have the ability to forage for grass and other surface plants in deep snow, so they did move to areas where winds and topography allowed them to graze in winter and these areas are more common in the chinook belt of the foothills and parkland of the western Alberta. The Foothills Parkland and rolling Foothills Fescue Natural Subregions of Alberta northwest, west and southwest of Okotoks provided such topographic and environmental conditions, particularly for peoples that wintered in the Sheep, Highwood, Elbow and Upper Bow River Valleys as well as the valleys of many large, permanent tributary creeks that feed those rivers. While Head-Smashed-In and a handful of other large buffalo jumps have iconic status, there are many more areas where large numbers of bison were acquired in highly organized and choreographed events, and there is ample reason to expect that a significant number of such sites are still undiscovered in the fescue grassland and parkland around Okotoks.

These large-scale events needed to be planned, organized and executed carefully and required thorough preparation and organization of people in order to acquire the food and other resources provided by the buffalo.

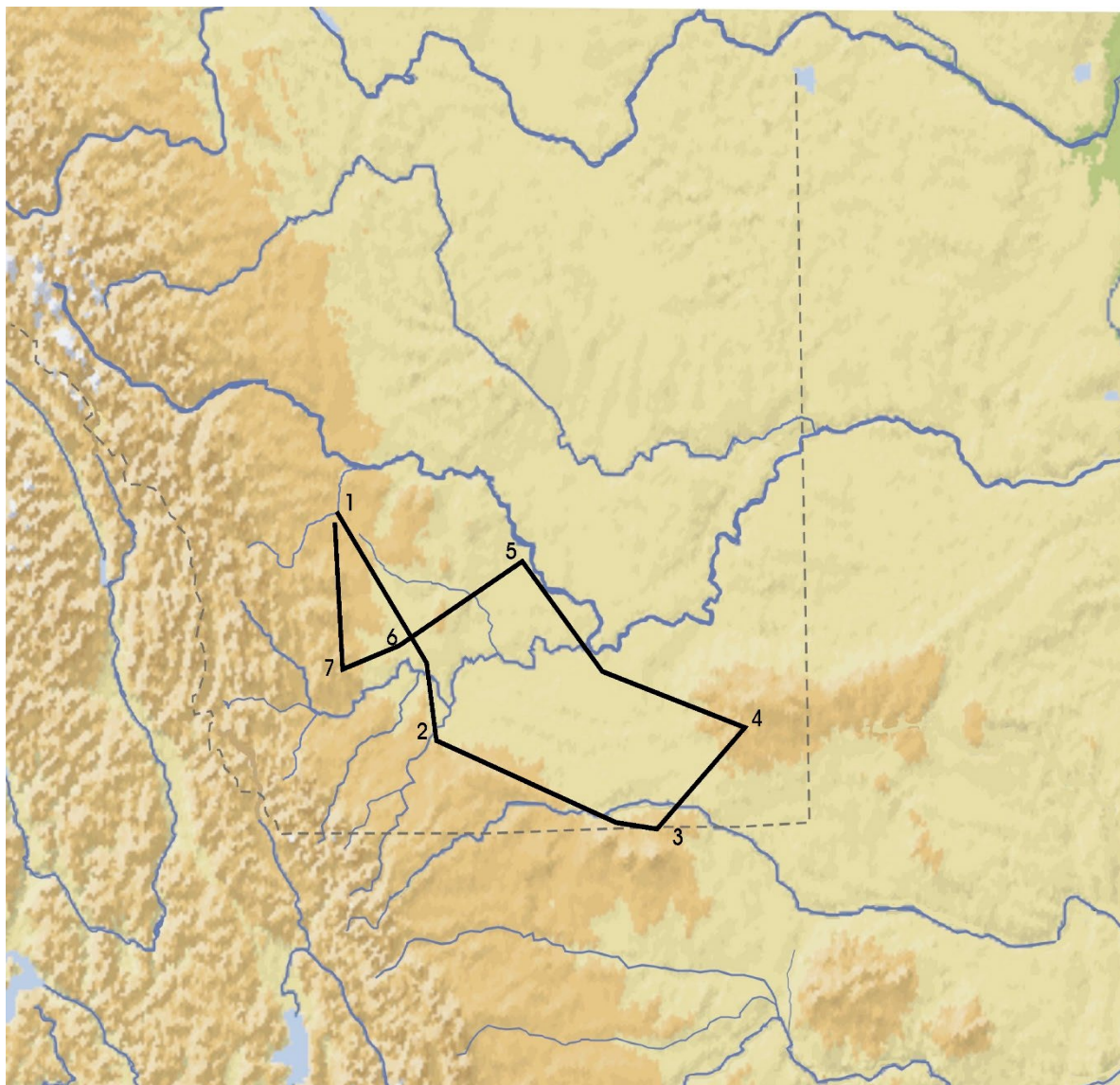


Figure 28. An example of seasonal round recounted by Andy Black Water recorded by Mirau and First Rider (2009). The wintering location is in Sheep and Highwood River area near Okotoks. With the arrival of spring, the seasonal cycle of movement is south to the St. Mary River (2) and southeast to the Sweet Pine Hills (3) to hunt and gather wood for lodge poles at Cypress Hills (4), then likely northeast to the Sun Dance area (5), southwest to hunt at and near Head-Smashed-In/Women's Buffalo Jump (6) and west to 7) to collect plants and more wood for poles before returning to the Highwood-Sheep River wintering area.

The End of the Seasonal Round

The seasonal round, a basic requirement for survival and human and environmental sustainability remained the dominant socio-economic system and lasted for thousands of years due to its adaptability, the relative absence of significant internal cultural factors that necessitated change and similarly, the absence of external disruptive forces. The external disruption that ended the seasonal round was the arrival of large numbers of Europeans in North America, the nearly complete extermination of bison and, subsequently, the restriction of First Nations to reserve lands. Although First Nations people continued to visit and obtain resources from the places they and their ancestors had visited for literally thousands of years, they were severely restricted from doing so by the federal government. The disappearance of the buffalo due, at least in part, to their economic value to non-First Nations people and their purposeful elimination as a central resource to First Nations was the critical factor in the collapse of the seasonal round. Shortly thereafter, the reserve period arrived and by the mid-1880s in Canada, the implementation of the pass system severely restricted First Nations mobility and right to obtain resources in their ancient territory.

The pass system, although never authorized under law in Canada was nevertheless implemented in policy and practice and severely impacted to southern Alberta and other First Nations. Essentially, the pass system forced anyone living on reserve to seek a permit to leave the reserve, identify the reason for leaving and inform the Indian Agent when they would return. Passes were difficult to obtain and there was no certainty they would be approved. First Nations persons caught off reserve were often jailed under the Vagrancy Act and forcibly returned to the reserve. The pass system only ended in Alberta in the 1940s, but even after that, authorities would often hold First Nations people and forcibly return them to the reserve. The late Frank Weasel Head, a notable Elder, stated that the practice only ended in the 1960s in some communities in southern Alberta and among its many other impacts, prevented First Nations from practicing their religion, from visiting the sites where their ancestors had lived and died and visiting sites central to their culture and history including, for example, the Okotoks Big Rock. A central figure in

implementing the pass system was Edgar Dewdney, after whom Dewdney Park in Okotoks was named. The permit system, although abandoned in practice by mid-century was only removed from the Indian Act in 1995. Okotoks recognized the problem of a park named Dewdney and on June 21, 2022, the Park was officially renamed *Piistoo Park*. “Piistoo” is the Blackfoot word for the common nighthawk, the bird that features prominently in the important story of Napi and the Big Rock. That story provides an explanation of how the Big Rock west of Okotoks came to rest in the place it now sits. This name honours First Nations’ culture and is relevant to both the Town and the region. We note that the Town is planning a display at Piistoo Park explaining who Dewdney was and presumably his role as Indian commissioner of the North-West Territories in the 1880s.

Pass.
DUPLICATE. *No.* _____

Date *Sept 25th* 1892

From Indian Reserve.

Deliver from Indian Supplies to

Big Prairie Head of Bull Head's Band has on account of permission to go to Calgary for one day to work. This pass good until sunset. Always yours for I.B. Lucas, Indian Agent.

ARTICLES.	QUANTITY.
<i>Big P Head has 10 chickens to sell</i>	

Agent.

Glenbow Archives M-1837-22a

Figure 29. This image shows a pass to leave the Tsuut'ina reserve issued to Big Prairie Head on September 25th, 1892 to sell 10 chickens in Calgary and that Pass was only good to sundown. As noted, Edgar Dewdney was at least partly responsible for implementing the pass system which came into practice in the mid-1880s. Courtesy of Glenbow Museum Archives Photographs.

PRE-CONTACT HISTORY

We have stated that the long human history on the northern plains was characterized by a resilient, stable and adaptive socio-economic system that focussed on both human and environmental stability. It is difficult to say how ancient people framed what is currently termed sustainability, but there is significant history including oral history that confirms and supports the idea that First Nations people were keenly aware of the need to preserve and maintain the environment they lived in. The primary point is that the notion of the interconnectedness between culture and environment permeated First Nations life, belief and to a large extent cultural practices. Given this stability, the period before the arrival of large numbers of European settlers has only one major division. Archaeologists and others divide the last 12,000 years into a number of eras and periods based on technological developments and innovations that occurred over the millennia. For example, the development and adoption of bow and arrow technology from the less powerful and shorter-range dart and atlatl technology constitutes, for archaeologists and others, a major evolution in technology that altered resource acquisition that had important cultural consequences. Similarly, the development and adoption of the use of pottery that allowed for changes in food preservation and other changes is considered an important and notable change.

Southern Alberta First Nations, however while recognizing these developments tend to view them as relatively minor changes that did not substantially alter their lifeways. As a result, these Nations tend to divide their history into two distinct parts. By far the oldest division is what is commonly referred to as the dog days. The dog days were succeeded by the horse days when horses started to be acquired, after the arrival of Europeans on the continent but well before large scale settlement in the west of Canada. The acquisition of the horse more or less coincided with the arrival of smallpox and other infectious diseases and a few decades before the start of the end of the buffalo era.

The Dog Days

The dog was the only domesticated animal on the plains and played a critical role in culture, survival and socio-economic practices for thousands of years. With the acquisition of the horse, cultural practices changed in fundamental ways. The horse brought increased mobility and the related ability for increased communication and interaction between Nations, bands and individuals, however, basic cultural elements that developed over thousands of years of life on the Plains remained the same. All of the cultural practices, beliefs and technology outlined above were formed prior to acquisition of the horse. Dogs played critical roles in hunting, the seasonal round and played the same role as companions that they have for the vast majority of cultures around the world.



Figure 30. Dogs and horses with travois. Even after the arrival of the horse, dogs continued to be important in Plains cultures. Courtesy of Glenbow Museum Archives Photographs.

Dogs feature prominently in their role as beasts of burden pulling travois as people moved from place to place with all of their belongings and dogs were critical in this role. However, they played other important roles. They guarded and helped protect villages, they were used in the hunt for animals and were important companion animals.



Figure 31. Elderly woman with dog. Courtesy of Glenbow Museum Archives Photographs.

The Horse Days

The introduction of the horse onto the northern Plains occurred concurrently with the first contact with Europeans. However, the cultural shift that occurred with the arrival of the horse preceded by many decades the arrival of large numbers of Europeans and disappearance of the buffalo. That is, by the time southern Alberta First Nations acquired the horse, the impacts of Europeans, primarily via introduction of deadly infectious diseases, was having devastating consequences.

Notwithstanding that, the horse quickly became an important element in plains cultures. The horse was firmly entrenched in southern Alberta lifeways by the mid-18th century (ca. 1725-1780) and has remained a large part of the First Nations plains cultures to this day. Some oral histories indicate that the southern Alberta First Nations acquired horses from western mountain Nations (Benthke 2016: 66); but it is more likely the horse was first acquired from the southern Shoshone, who had acquired them directly from Spanish invaders into central America and what is now the American southwest, or from other Nations further south.



Figure 32. An early illustration of a Blackfoot man drawn in 1833.

The best-known account of how the First Nations people learned of horses comes from Saukamapee, a Cree person who was living with the Piikani in the 1700s as told to fur trader David Thompson (Tyrell 1916: 334 in Bethke 2016: 66-67). The story tells of Blackfoot who were in Shoshone territory to hunt bison and deer and came across a horse that had been killed.

“We all admired him, he put us in the mind of a stag that had lost his horns; and we did not know what name to give him. But he was a slave to Man, like the dog, which carried our things, he was named Big Dog”
(Tyrell 1916: 334 in Bethke *ibid*).

At the time, the southern Alberta Nations were allied against the Shoshone and it is likely the first horses in southern Alberta were acquired by raids against the Shoshone. It is equally likely that deadly encounters with the Shoshone were at least partly the result of the Shoshone acquiring the horse and expanding north. Southern Alberta Nations however

had acquired the gun earlier than the Shoshone and effectively ended the expansion north in a few years.



Figure 33. Stoney men on horses, ca. 1900.

The introduction of the horse onto the Plains brought about a relatively prosperous time to southern Alberta First Nations culture, despite the repeated smallpox epidemics and the cultural devastation that occurred as result of disease.

The horse enabled southern Alberta Nations to further excel as bison hunters, and increased mobility provided by the horse resulted in increased conflict between neighbouring camps, but that mobility also permitted the accumulation of more material goods, the build up of wealth and essentially the end of virtually universal social equality where accumulation of significant wealth was very rare.



Figure 34. Blackfoot woman with her horse with travois in Blackfoot Camp on a postcard. Courtesy of Glenbow Museum Archives Photographs, M-285-11-78.

After the over-exploitation of small fur bearing animals (including the beaver), and the introduction of steamboat and rail to areas within the Northern Plains facilitating the transportation of goods from inland to the coast and eventually to Britain, demand for bison robes rose dramatically (Ewers 1955; Lott 2003). This increase in demand initially saw a flow of money into southern Alberta. Women were the main producers of the robes, and therefore there was an increased demand for female labour during this time but it was short lived. The “Hide Rush” (Lott 2003 in Benthke 2016: 87) was in effect by 1871. This period of vast over hunting of Plains bison herds primarily by non-Indigenous people was essentially the final blow to the stable socioeconomic system that had been in place for thousands of years. As Benthke (2016: 87) commented:

“The bison hide trade, at first viewed as a source of prosperity to the [southern Alberta First Nations] people, eventually entrapped them further in a global capitalist economy that forced the overhunting of their most precious resource.”

The collapse of the Fur Trade of small fur bearing animals by Hudson Bay Company in the 1830's, created an economic vacuum on the Northwest Plains. By the 1860's, American whiskey traders and trappers were established in southern Alberta and Saskatchewan to capitalize on the prosperous bison robe industry and the illegal bootlegging of alcohol into the United States. The invasion by whiskey traders saw the introduction of alcohol into plains culture that had rampant sociocultural impacts within traditional culture.

The Horse Days, and the subsequent periods associated with the bison robe, fur and whiskey trade, are marked by numerous smallpox and measles epidemics, increased alcoholism, droughts, a series of harsh winters and the extremely high human predation of bison which essentially decimated all southern Alberta First Nations populations. In the latter 1800's the Piikani alone are recorded to have numbered over 3,000 (Dempsey 2001; Zedeño et al. 2014), with the Blackfoot as a whole numbering between 9-16,000 (and possibly 20,000) people (Ewers 1958). The smallpox epidemic of 1782 (Biinema 2001: 120-130) is believed to have killed two thirds or more of Blackfoot people. The smallpox and measles epidemic during the 1860's reduced populations even further. The Stoney Nakoda and Tsuut'ina were similar impacted by disease. The Tsuut'ina may have numbered around 300 people in the mid 1800s and Stoney Nakoda of the Foothills and Plains may have numbered around 1000.

In September of 1877, the three Blackfoot Nations, the Tsuut'ina and Stoney Nakoda Nations signed what they believed was a Peace Treaty (Treaty 7) with the Government of Canada (Dempsey 1994). Treaty 7 was not a peace treaty, but rather part of a larger Canada-wide assimilation policy restricting the freedom of First Nations groups, which essentially impacted the cultural lifeways of all of Canada's first peoples (TRC 2015). Prior to the implementation of this policy and despite the deleterious impacts of the whisky trade and the introduction of infectious diseases that First Nations had little or no immunity to, southern Alberta First Nations were relatively prosperous and had little need for government aid and its restrictive policies that came with the treaties.

By 1883 bison populations were exhausted. In 1883-1884 over 600 Piikani people starved to death due the loss of the bison as a resource, crop failure, and harsh winter temperatures of up to -50°C (Schultz 1907; see also Benthke 2016, Chapter 2 for complete overview). The impact of disease and the overhunting of bison saw people forced to turn to the government for assistance. Southern Alberta Nations groups were subsequently forced off the majority of their traditional territory and onto reserves. First Nation's People had their human rights almost completely stripped away during this time. This is known as the reserve Period. We do not discuss the reserve period further here, but it is important to note that in spite of the hardship as result of disease, lack of food and assimilation policies of government, all Nations strove to and were successful in preserving their culture. As noted above, however, the reserve period bought about a significant decrease in the presence of First Nations in what is now Okotoks.

Notwithstanding the impacts of the collapse of the traditional economy and the restriction of people to reserve lands, and efforts at assimilation by the invading culture, First Nations, thanks at least partly to their traditional ways of retaining their history via oral histories and stories based on their physical surroundings, were able to pass knowledge to succeeding generations. The Stoney, Tsuut'ina and Blackfoot First Nations were all present in the area where Okotoks now stands and the retain their historical knowledge of this area, from the Big Rock to the Old North Trail and to the area's role as a sheltered winter occupation area, as an area rich in important traditional plants and an important buffalo hunting area. The Sheep River was an important drainage and the valley was heavily used for all the reasons above. In addition, where Okotoks now stands offered generally easy fording and so the people funnelled to this area to cross the river.



Figure 35. Blackfoot woman drying meat in the sun ca. late 1890s Courtesy of Glenbow Museum Archives Photographs.



Figure 31: Camp in the Rocky Mountains. Courtesy of Glenbow Museum Archives Photographs.

Old North Trail

Travel to obtain the resources needed on the northern Plains was a fundamental part of life. And travel was not random, it was carefully planned and travel then as now followed established routes. The Old North Trail ranks as an iconic, highly significant and unique historical feature of the Plains and possibly one of the oldest and longest-used travel routes anywhere. The Old North Trail and its proximity and its importance to the Town of Okotoks and the surrounding region warrants further discussion.

In the centuries prior to the reserve period, long distance movement was not uncommon. Travel with or without either dogs or horses was made considerably less complicated by following established trails. Pulling a travois loaded with hides for shelters, clothing, tools and other goods was not an easy task even for the largest dogs or horses and following established routes that had been smoothed and made even by tens, hundreds or even thousands of years of use and familiarity was far easier and better than breaking new trails across the landscape. Corridors of trails allowed people to rendezvous particularly at certain times of year, and in so doing, the culture survived.

Traditional history and other evidence indicate the Old North Trail passed through or very near the modern location of Okotoks. It is likely any visible remains of the Old North Trail in this area were obliterated by early cultivation and the development of the Town as a Euro-Canadian settlement over 100 years ago. However, the proximity of the Trail to the town seems beyond question.

Brings-Down-the-Sun was a famous Piikani chief who knew the history of his Nation and the region very well. It is notable that as early as 1900, he was well aware that the trail was gone in many places and that he was equally well aware of the extent and history of the trail. According to McClintock (1910: 327-328), Brings-Down-the-Sun, in describing the history of Trail stated:

There is a well-known trail we call the Old North Trail. It runs north and south along the Rocky Mountains. No one knows how long it has been used by the Indians. My father told me it originated in the migration of a great tribe of Indians from the distant north to the south and all tribes ever since, continued to follow in their tracks. The Old North Trail is now becoming overgrown with moss and grass, but it was so deeply by many generations of travellers that the travois tracks and hors trail are still plainly visibleIn many places the white man's roads and towns have obliterated the Old Trail. It forked where the city [sic] of Calgary now stands. The right fork ran north into the Barren Lands as far as people live. The main trail ran south along the eastern side of the Rockies, at a uniform distance from the mountains keeping clear of the forest and outside the foothills.....It extended south.in the country, inhabited by people with dark skins and long hair flowing over their faces [McClintock interprets this as Mexico].

Reeves (1990) has done perhaps the most extensive and well-researched archaeological examination of the Old North Trail and has included significant information and discussion of the Trail derived directly from First Nation accounts and historical knowledge. Some archaeologists have regarded the Old North Trail essentially as mythical (Davis 1980). This conclusion apparently was reached with virtually no regard to First Nations historical accounts or descriptions of the trail. The tendency of some archaeologists to discount oral histories is part of the colonialist approaches and attitudes and directly discounts and denigrates First Nations history and knowledge of the past that still exists and remains intact. Reeves does not make this mistake in judgement or practice and credits First Nations history and knowledge as a necessary and critical component of archaeological research. He states (1990: 17):

The Old North Trail is indeed ancient. It is allegorically referred to in Nitsitappi cosmology [Reeves here is referencing the Napi and Big Rock story where Napi is chased by the Big Rock and runs northward to where the Okotoks Big Rock now stands, essentially creating the Old North Trail]. The

[First Nations] people have long recognized the antiquity and significance of the trail for they refer to it as the Old Trail. This Old North Trail is a long-standing and enduring feature of the Native American People's archaeological heritage. They have resided in these lands for over 10,000 years. The trail is not the product of the introduction of the horse. Nor is the Old North Trail the result of whitemen's overripe imaginations.

The Old North Trail is not recorded as a known archaeological site within the Town of Okotoks, however likely that the Old North Trail crossed the Sheep River in or near what is now the Town of Okotoks. There were known fords of the river in this area and although favoured fording areas varied through time as the river changed course within the inner valley, as all southern Alberta rivers do, fords will move only as far as the nearest convenient crossing when the river shifts from place to place.

It is likely any visible remains of the Old North Trail were obliterated by early cultivation and the development of the Town as a Euro-Canadian settlement over 100 years ago as outlined by Brings-Down-the-Sun.

Brings-Down-the-Sun told McClintock (1910: 328) stories that had been told to him about Blackfoot people travelling south on the trail and that were gone for years before returning. He goes on to generally describe the route of it in southernmost Alberta and states that it crosses the St. Mary River and Lee Creek. The Blackfoot name for Lee Creek is Banks-Roped-Together] south of where the Town of Cardston is now located. Its route from there to Calgary is not specified, but based on related archaeological information and research, Amundson-Meyer (2014) indicates a crossing at or very near the Town of Okotoks is likely. It is well known that historic trails in Alberta and elsewhere followed pre-existing trails created by First Nations people and we infer here on the basis of the old Macleod Trail route between Fort Macleod and Calgary, followed, at least in an approximate way the Old North Trail (Amundson-Meyer 2014: 153-186, 220). Although travel on any trail, including the Old North Trail and Macleod Trail in the premodern era would have

presented different obstacles and opportunities, there are also similar obstacles and opportunities. Streams would need to be forded locations suitable for carrying significant loads. This is true for both the travois travel days and for the period when horse or ox drawn wagons were being used on the trails. First Nations did have crossing options, but a relatively shallow crossing where humans, horses and dogs could wade were easiest. If waters were too deep, First Nations people could and did construct small boats using tipi hides or rafts to cross, but that was more time and energy consuming than wading. Similarly, wagons could only cross unassisted behind animals where the streams were shallow enough. It is therefore logical that wagons would follow travois trails and use the crossings that were favoured by First Nations.

An important issue for crossing rivers in normal prairie drainages is the route into and out of the valley that the river is located in. River valley slopes vary greatly from place to place and relatively low-angle slope access into those valleys was critical both for travois and wagon travel. The known access into the Sheep River valley used by the Macleod Trail wagon route from the north follows a long, but relatively low-angle slope, one of the few lower angle approaches in the area, and it is not unexpected that the travois route followed the same approach. There is, as yet no direct evidence that this approach was used by the Old North Trail, but that inference is unquestionably possible. It is also the case that the Old North Trail was not a single track for the thousands of years that it was used, but more a group of braided trails that varied through time given local conditions and circumstances, even though it followed the same general route.



Figure 37. Stoney-Nakoda Elders and experts discussing the traditional resources in the Sheep River Valley and possible crossings of the river by the Old North Trail. This photo taken along South Railway Street southeast of the location of the where the Old Macleod Trail as it enters the Valley is located. The discussion here focussed on important plants in the riparian gallery forest and what potential there is for buried remains related to a fording location in this area.

In a 2015 news piece on Old Macleod Trail and its history and preservation, local resident and advocate for its protection, David Williams said of the coulee approach to the Sheep River valley used by the Old Macleod Trail (Okotoks Today, 2015):

I think it's one of the big reasons that Okotoks is the place it is...because of the good ford across the stream plus an easy, consistent way up the hill [to prairie level on the north side of the Sheep River Valley].

Oral histories are clear in the general location of the Old North Trail and the fact that it generally paralleled the glacial erratics train in southwestern Alberta, including most notably the Big Rock. The archaeological evidence that is available supports the oral

histories (Amundson-Meyer 2014; Reeves, 1990;). We can state unequivocally the Old North Trail crossed the Sheep River Valley in or near the Town of Okotoks.

Okotoks has protected that portion of the valley slope access used by Old Macleod Trail that remains undisturbed, and again it is likely that this same access was used by First Nations Old North Trail travellers, possibly for thousands of years. While this section of coulee is undisturbed, over time sediments from side slopes would have been washed down and covered former coulee bottoms. It is possible that material remains of past users going back centuries to millennia are present beneath the modern surface in the area. The Town of Okotoks can play a critical role in helping preserve part of Old North Trail and by providing interpretative information on the Trail and its history. This is discussed further in the recommendations section of this report.



Figure 38. Coulee in Okotoks used by the Old Macleod Trail and likely a route used by the Old North Trail as it crossed the Sheep River Valley. Photo by Town of Okotoks and republished here from Alberta Register of Historic Places Record. This document records it as the Old Macleod Trial, (Alberta Register of Historic Places, Macleod Trail Cultural Landscape 2022).

The Old North Trail may be one of the oldest and well-known trails in North America. The fact that it warrants a place in myths and legends, far from suggesting it is a product of imagination, demonstrates its great antiquity. The Trail is undoubtedly thousands of years old and should be considered one of the most important physical elements of First Nations cultures in Alberta and beyond. Unfortunately, modern development has destroyed much of the actual trail, but it is also true that future research could uncover as yet unknown remnants of the Trail in Alberta. As indicated above, the likely presence of a portion of the Trail within the Town of Okotoks is very important to southern Alberta First Nations and the history of the Great Plains over thousands of years.

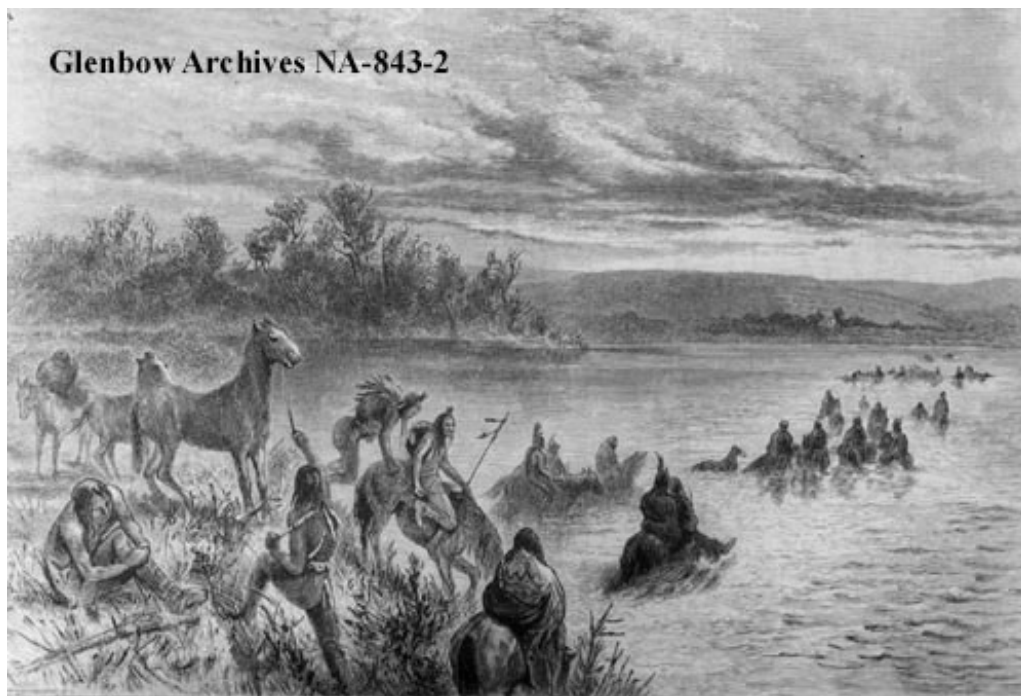


Figure 39. This image drawn ca. 1881 and titled "Blackfoot people crossing a river" is likely at least slightly romanticized, since it shows a location that probably would not have been favoured, but it does provide an indication of the necessity for careful planning and execution of a crossing event, and by inference indicates people would have used the same known crossing locations whenever possible. Courtesy of Glenbow Museum Archives Photographs.

RESEARCH STRATEGY AND METHODOLOGY

This section outlines the research design and methodology for the project and provides relevant background and contextual information. Consultation with Elders and experts was a central part of the TKLUA. Elders that participated on this project are established experts with broad knowledge of their respective Nation's culture, history and traditional economy. Elders are the primary holders of traditional knowledge and both Elders and experts participated in meetings and were an integral part of the field-truthing phase of the project.

It is difficult to overestimate the importance of Elders to First Nations both in the distant past and to the present day. Despite the overwhelming effects of 21st century technology, a modern and complex socioeconomic system, and ubiquitous digital information, Elders continue to play a critical part in retaining culture, providing guidance to young people and continuing to dampen and help erase the impacts of the residential school era and past assimilationist policies of governments. Although the Okotoks TKLUA project uses historical, anthropological and archaeological data and information, this data and information is viewed as supportive of Elders' and other First Nations expert views, knowledge and history. The report includes significant contextual information and a general summary of Pre-Contact culture that is based on archaeological research that has been conducted in southern Alberta from about mid-20th century to the present, as well as documentation, writing and records of mostly European writers that spent time with First Nations from the early 1800s onward.

The Town of Okotoks has been greatly impacted by normal urban development. Although the project considers the Town's location in its traditional context and evaluates and comments on the area's significance in relation to that context, a major element of this project was to assess minimally disturbed or undisturbed lands in Okotoks and owned by the Town to identify traditional uses, resources and report on the First Nations' history of this area. The lands examined herein were mostly limited to the Sheep River Valley within the present urban area of the Town. Significant parts of the valley are privately-owned

and were not accessed, and there is no significant tract of undisturbed land on the prairie outside of the river valley within the Town. We note that 2021 boundaries of the Town include lands annexed in 2016-17 and the TKLUA site visits included a driving survey of areas in the annexation area, however, we did not conduct any direct fieldwork on those lands. The majority of the annexation area has been disturbed by agriculture, residential development and related infrastructure and therefore had limited potential for containing important extant traditional resources.

Fieldwork focused on assessing the nature and conditions of minimally disturbed lands in the river valley via physical field inspection and consultation with and between Elders and experts. The field team examined accessible natural areas in both warm and cold season conditions, recorded naturally occurring plants, discussed oral histories and traditions of use and presence in the valley, seasonal occupations, the proximity of the Town to highly significant cultural locations, including but not limited to the Big Rock, the fording locations used by travelers along the Old North Trail, the confluences of the Sheep and Highwood Rivers and the Highwood and Bow Rivers, and major large-scale bison hunting sites.

The survey area is shown in Figure 40 below. The boundary of the area as shown here was derived from handheld GPS units. During field work, we endeavoured to ensure we did not enter any privately owned lands. We also conducted limited area “windshield surveys” of some other open and park areas in the Town, however, the potential for extant First Nations/Indigenous cultural or historical resources on those lands was considered limited and that combined with covid-related limitations meant that those lands were not examined in detail. That is, not all of the outlined assessment area was subject to detailed survey, rather areas were sampled to obtain information and data on the larger area. Specific areas within the river valley selected for sampling were based on an initial examination of remotely sensed data such as air photos, topographic maps and the locations of known or inferred historically significant sites. We also attempted to visit examples of various microhabitats within City-owned lands that had potential to contain specific traditional plants. For example, Elders selected areas where specific types of

willow plant that were commonly used were known to occur and actively searched for those areas. It is important to note however that both the field survey and the overarching principle was to situate Town of Okotoks lands within their original regional context.

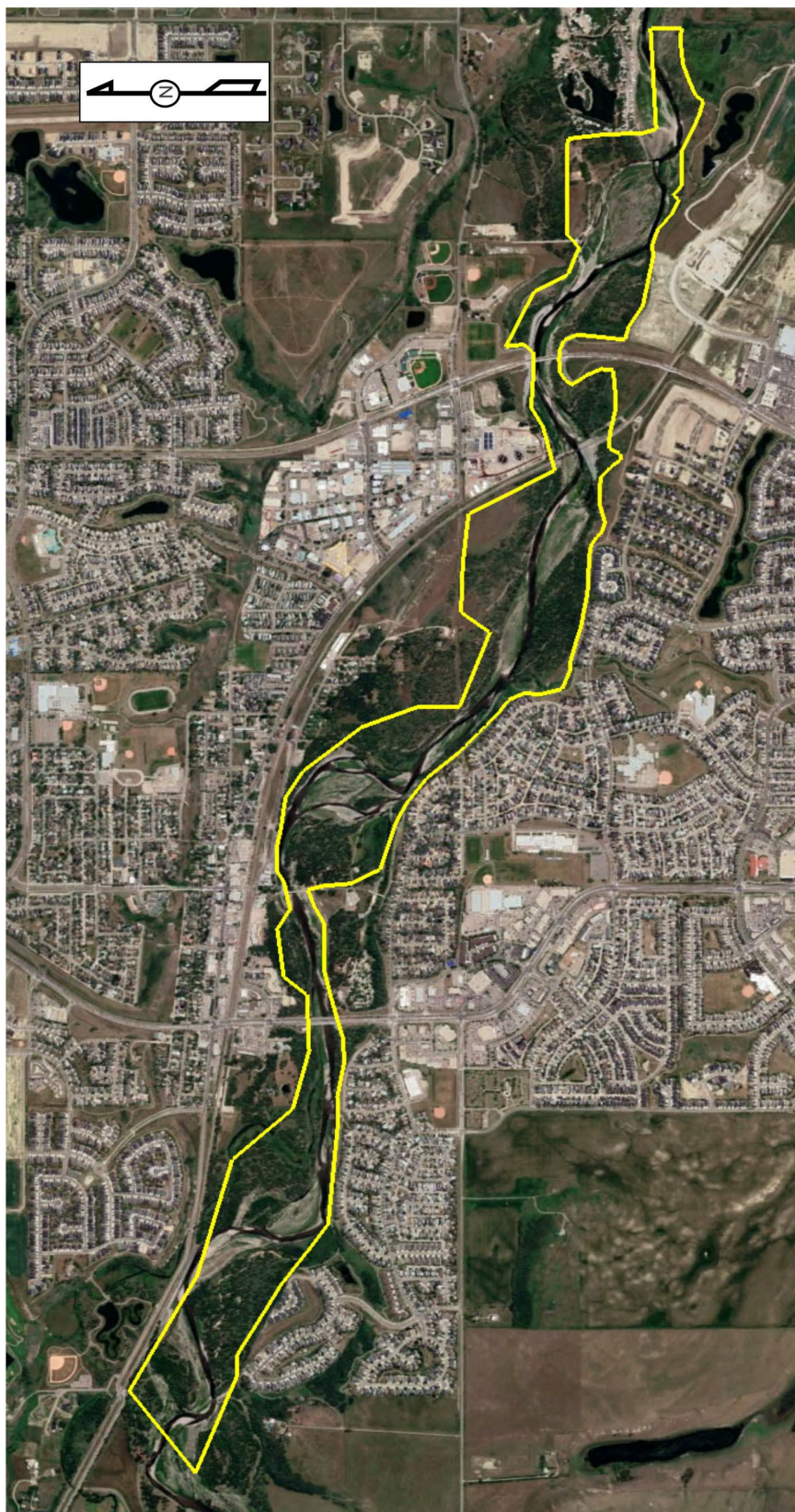
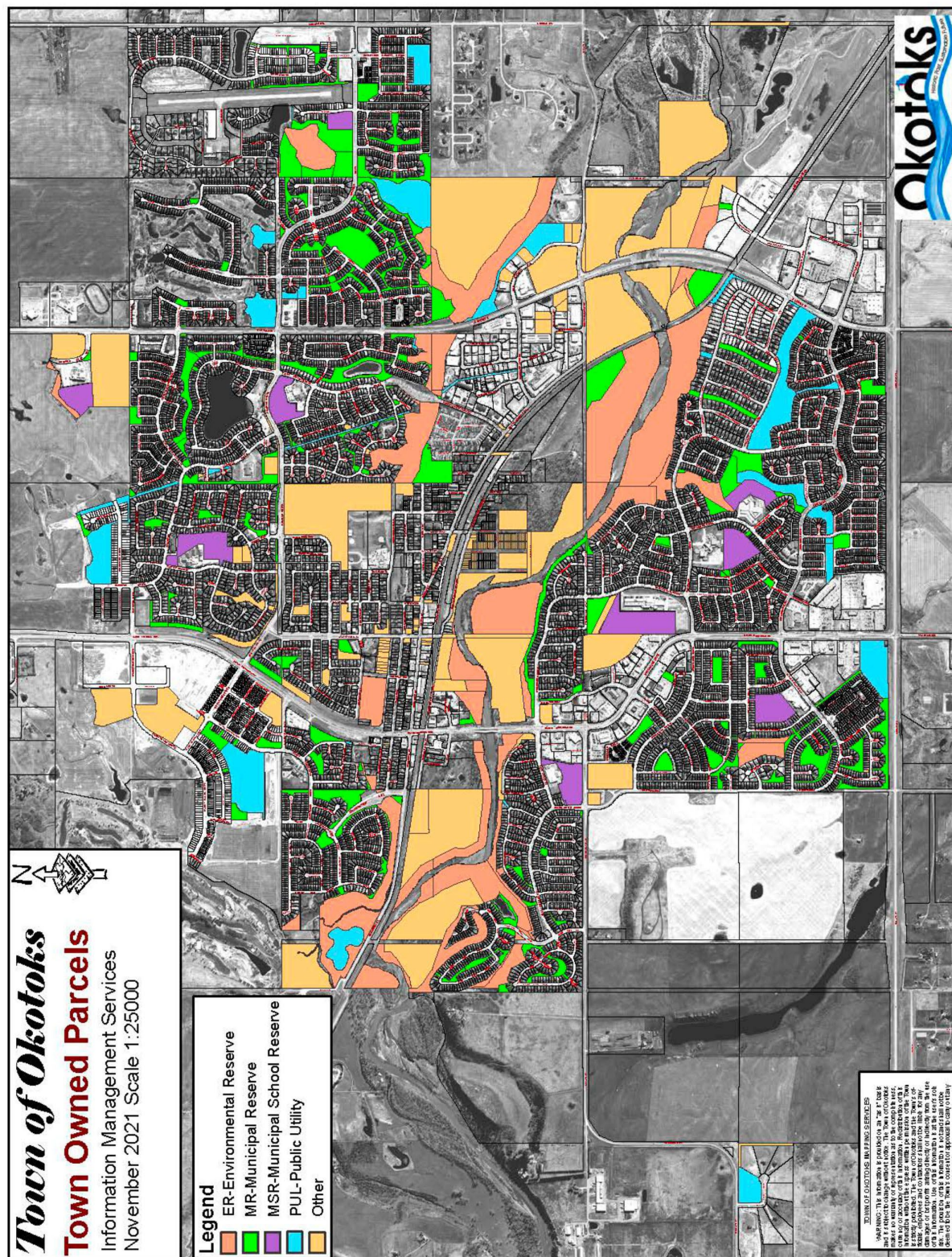


Figure 40. The yellow polygon represents the extent of survey area in the inner Sheep River in within the developed area of the town, that is excluding the annexation land. Not all of the area as identified here was subject to field examination since areas of the area are on private land and some were subject to previous disturbance. The area shown however has potential to contain extant traditional historical resources such as plants and additional burial to contain as yet unrecorded cultural materials and indications of past occupation by First Nations.



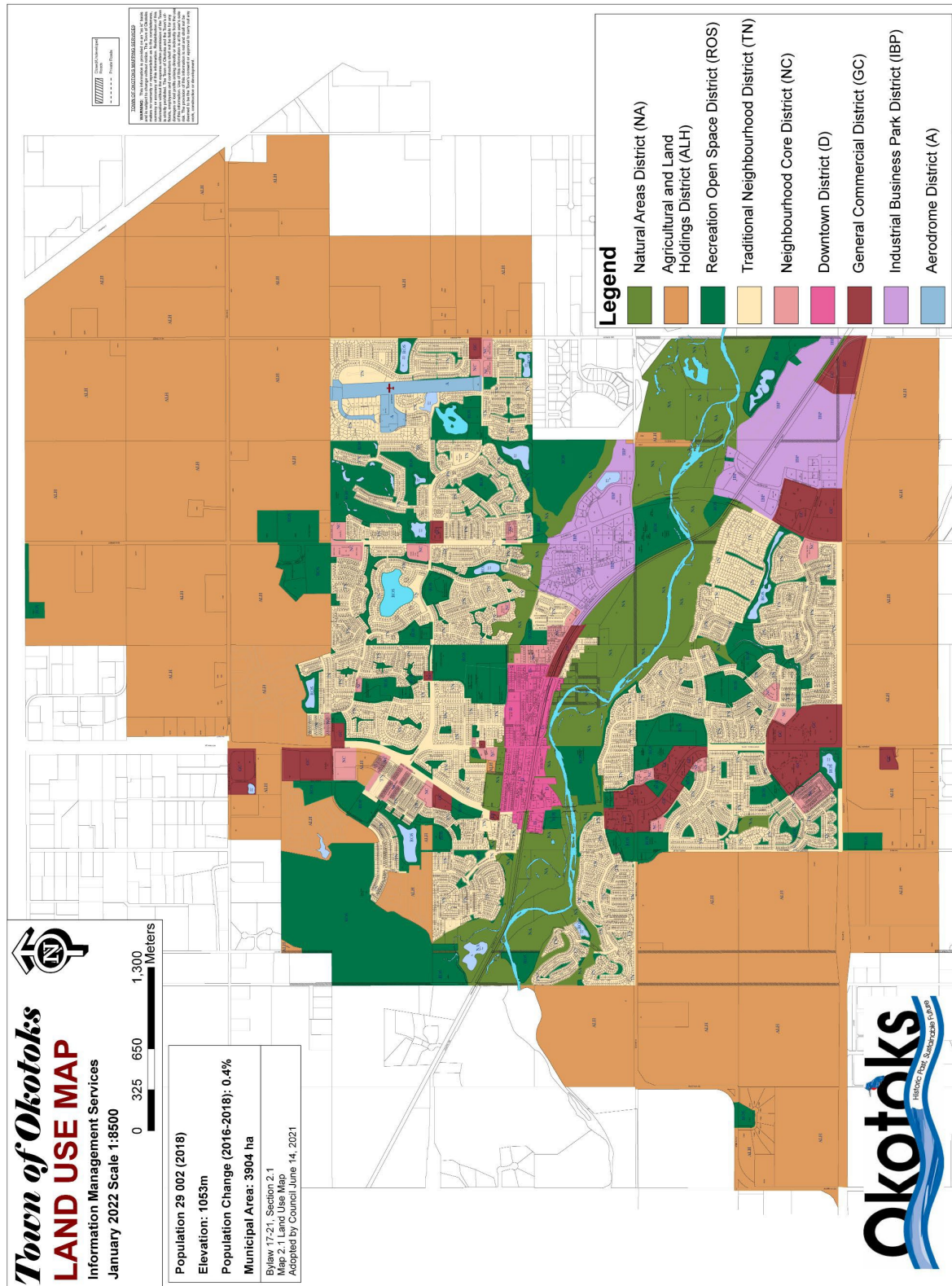


Figure 42. This Town of Okotoks map and previous versions were used to determine land use classification in the Town.

Aside from its historical significance as an area of occupation and use in the past, The Sheep River Valley in the Town is important to First Nations for its remaining natural area's and the traditionally important and other plants it supports. Southern Alberta and adjacent sections of northern Montana and eastern Saskatchewan are estimated to have had approximately 1000 to 1500 species of naturally occurring plants prior to the arrival of Europeans. Since the advent of modern agriculture, global trade in plants and modern travel, at least several hundred non-cultivated species have been introduced to this area. That is to say, non-native plants have invaded and, in many places, replaced native plants in what are considered natural areas. This excludes major cultivars such and cereal grains and plants grown domestically in gardens or residences such as non-native trees. Plant experts noted the presence of invasive species in some areas and this is addressed in our recommendations.

Current research, Elder knowledge and direct ethnographic evidence indicates modern First Nations people use 60 or more different naturally occurring plants that do, or are likely, to occur on undisturbed lands in and near the Town. We did not record every traditionally used plant that was observed, however we did record the general location of observed plant resources that are considered important, including several that appear to be scarce in the natural environment that remains in southern Alberta. These traditionally used plants include ones used for subsistence, medicinal and ceremonial purposes. Examination, identification and discussion of the naturally occurring and important native species was a focus of the fieldwork.

Another important element of the TKLUA was to assess remaining natural lands in the river valley in order to make inferences of their potential to contain as yet unrecorded, unverified remains of past occupations, such as habitation sites and ceremonial sites. This entailed examination of local conditions such as topography, microtopography, aspect, vegetation and related biogeophysical factors that would have played a role in influencing specific land uses such as warm or cold season habitation, resource

acquisition and short-term camps. This including for a search for potential river crossing areas that might have been used by people travelling along the Old North Trail.

It was our initial intention to conduct all fieldwork in snow free conditions, however some work was conducted in the winter of 2021 in cold weather conditions due to travel and meeting problems related to pandemic protocols and sensitivities. This winter work, however, proved useful since it allowed Elders and experts to consider the area's importance and use as a wintering area.

We also conducted archival and published research that was relevant to this project including, but not limited to, topographic maps and historical air imagery of the area, ethnobotanical works relevant to southern Alberta First Nations, archaeological site research conducted in the Town of Okotoks since enactment of the *Alberta Historical Resources Act* and other historical information and data as required. We examined Town of Okotoks maps such as land use and maps of lands owned by the Town of Okotoks. Several recent Town Master Plans were reviewed to determine their relevance and applicability to issues related to the TKLUA.

The contextual information outlined here informs and provides guidance for our research design and the project outcomes. All key members of the team have knowledge of and/or have participated in the development of the South Saskatchewan Regional Plan, the Truth and Reconciliation Commission of Canada: Calls to Action and United Nations Declaration of the Rights of Indigenous Peoples.

The use and occupation of this area over 12,000 or more years means that traditional knowledge and history is extensive and that, despite modern development, traditional resources and areas still exist.

This Traditional Knowledge and Land Use Assessment considered the relevant portions of UN Declaration on the Rights of Indigenous Peoples (UNDRIP) and the Truth and

Reconciliation Commission Calls to Action as general guiding principles for the Okotoks project. Specific examples of the applicability of these documents to Okotoks initiative include, but are not limited, to Article 11(1) of the UN Declaration that states in part:

Indigenous peoples have the right to practice and revitalize their cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites, artefacts, designs, ceremonies, technologies and visual and performing arts and literature.

and Article 31(1) of the same document that states in part:

Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as manifestations of their...knowledge of the properties of fauna and flora.... They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions (UNDRIP 2008).

The Truth and Reconciliation Calls to Action calls upon all levels of government to implement, respect and adhere to UNDRIP.

All team members are familiar with the sensitivity of cultural and traditional information and intellectual property rights. Team members were responsible for confirming the sensitivity of information and determining what could be included in the public version of the report versus culturally significant material that cannot be shared. This report thus contains information that has been deemed appropriate for the public.

RESULTS

The results presented here are the outcomes of archival and literature research, field work discussions with First Nations Elders and experts regarding the Okotoks area, its cultural history, environmental/land use significance and its place in southern Alberta First

Nations' homeland. The results are not presented in order of importance or relevance, nor should they be considered to be a complete record of southern Alberta First Nations' knowledge and land use in what is now the Town. Rather they are examples of why the Town, despite the near absence of a significant First Nations presence in the last 100 or more years, remains historically, culturally and traditionally important.

Although the study of the area known now as the Bible Camp lands was previously submitted as a separate and self-contained report, this section includes some discussion of traditional sites and resource elements that were observed within those lands.

This section starts with the results of the search for and assessment of the potential within Okotoks to contain as yet unrecorded occupation or other land uses that occurred prior to permanent non-First Nations people.

First Nations Pre-Contact and Early Post-Contact Archaeological Sites and Land Use Areas

Field assessments intended to identify areas where possible unrecorded First Nations archaeological materials could occur were limited to the inner Sheep River Valley. We define the inner valley as the modern flood plain of the river, the lower aggradational terraces and some alluvial fan remnants that are mostly undeveloped or minimally developed. These lower terraces and modern flood plains are the most significant remaining natural areas in the Town and the only major zone that contains significant minimally disturbed or undisturbed terrain. Several areas showed indications of past disturbance including now abandoned areas of cultivation, probably used for growing hay and possibly some small areas of cereal grain crops, however there are relatively extensive areas of more or less undisturbed terrain. The project team divided these areas primarily into two categories, the modern flood plain that supports rapidly growing and significant traditional plant resources, primarily willow but other plants as well. The existing flood plain is less than 1 m above the modern channel of the Sheep River and is a water-scoured or erosional surface. That is, in high water events fine material such as silt material is often removed from the flood plain, leaving gravel and/or coarse sand

sediments. The Sheep River meanders back and forth over time within the inner valley and since it is prone to flooding and flood plain scouring and erosion, the possibility of flood plain areas having any major evidence of Pre-Contact human use at or near the surface is low or non-existent.

Level to slightly sloping fluvial landforms in the river valley are prone to flooding but since these landforms do not scour or erode readily, they tend to accumulate sediment and become zones of deposition left receding flood waters. These landforms, including aggradational terraces and alluvial fans were favoured habitation sites. The relatively frequent inputs of new sediments from flood waters have made them, for most of the last 12,000 years, fertile and capable of supporting riparian gallery forests and accompanying vegetation. These gallery forests still exist in minimally disturbed areas along the Sheep River. These terrace and fans can preserve evidence of past human occupation by burial in sediments. They support a wide range of naturally occurring and important plant resources that are not commonly found on the open plains grasslands or forested uplands of the foothills. As discussed in previous sections, areas with good access to wood for fuel and other purposes, availability of water and abundant plants for food and shelter meant they were occupied at all seasons of the year and were favoured wintering areas. In addition, favourable river fording locations occur in and near the Town including along the historic Old Macleod Trail that likely followed earlier First Nations routes including the Old North Trail and habitation sites both longer and shorter term often occur at fording locations.



Figure 43. Sheep River Valley in Okotoks. Elder walking on scoured flood plain landform with trees is an aggradational terrace.



Figure 44. Gallery forest on aggradational terrace in Okotoks.

The terraces and fan forms of the Sheep River Valley in Okotoks are traditionally significant areas for both their potential to contain buried cultural materials and sites and the ubiquity and variety of important traditional plants. Figure 40 shows the approximate extent of these landforms in the valley. The locations were determined using remotely sensed data and in-field examination. The polygons shown in Figure 47 are considered to be areas within the Town that have the highest potential as yet unrecorded physical evidence of past First Nations presence within the urban area of Okotoks.

There are 42 previously recorded First Nations archaeological sites within the Town of Okotoks, and an additional 39 recorded sites in and along the Sheep River Valley approximately 1.5 km east and west of the Town. All of these sites were recorded after the mid 1970s either as University of Calgary archaeological surveys conducted by students, Historical Resources Impact Assessments (HRIAs) required by the provincial regulatory body prior to a land development project or following the 2013 flood via a Alberta government project to assess the impacts to archaeological sites and areas along the Sheep, Highwood, Bow, Elbow and other significant water courses in southern Alberta area that experience significant erosion and stream change due to flooding. Although few, if any these recorded sites have been radiometrically dated, limited available evidence suggests they range from over 7,000 years ago to the period after contact with Europeans in the last 250 years.

Sites in Okotoks were mostly recorded by HRIAs required in advance of residential developments. These HRIAs were conducted by private archaeological consulting firms retained by developers, and most sites recorded under these HRIAs were on privately-owned lands. Most were investigated, mitigated as required by the *Alberta Historical Resources Act* and then destroyed by development. Evidence gathered during the mitigation phase indicates most were occupied for short periods of time. The locations of these sites are shown in Figures 45 and 46.

Figure 46 shows the locations of the same sites as Figure 45 on a 1950 air photo of the Okotoks area. Many of the recorded sites were located on lands that were disturbed by cultivation when the HRIAs were completed and therefore contained limited contextual information. Most of the sites were recorded as scatters of cultural material, primarily the stone tools and fragments of stone tool production, some bone and with some evidence of small hearths. There is therefore little evidence for the sites' functions or any indication of long occupation.

Although these sites no longer exist, we can make inferences regarding the importance of this area from them. These sites represent only the ones that were recorded after the enactment of the *Alberta Historical Resources Act* in the early 1970s. It is likely that additional sites in this area were destroyed by cultivation from the beginning of cultivation in the area in the first decade of the 20th century. The relative site density indicates the area was important to First Nations use of the area, as we already know from oral histories, myths, legends and the richness of its natural resources. The presence of the remains of sites as documented in the archaeological remains provides physical evidence-based confirmation of the oral histories of the area. It should be noted the distribution of recorded sites also indicates the distribution of permitted archaeological assessments and therefore, the site density is a partial reflection of the archaeology that has been done in the area. That is, given the number of HRIAs within the Town boundaries, more sites have been recorded in the Town and in the immediately surrounding area and that fact is reflected by the distribution of sites in the area. Apart from limited research and archaeological investigation following the 2013 flood, there have been few sites recorded in the inner Sheep River Valley. The number of recorded sites in that area does not reflect the area's cultural history and that is discussed further below

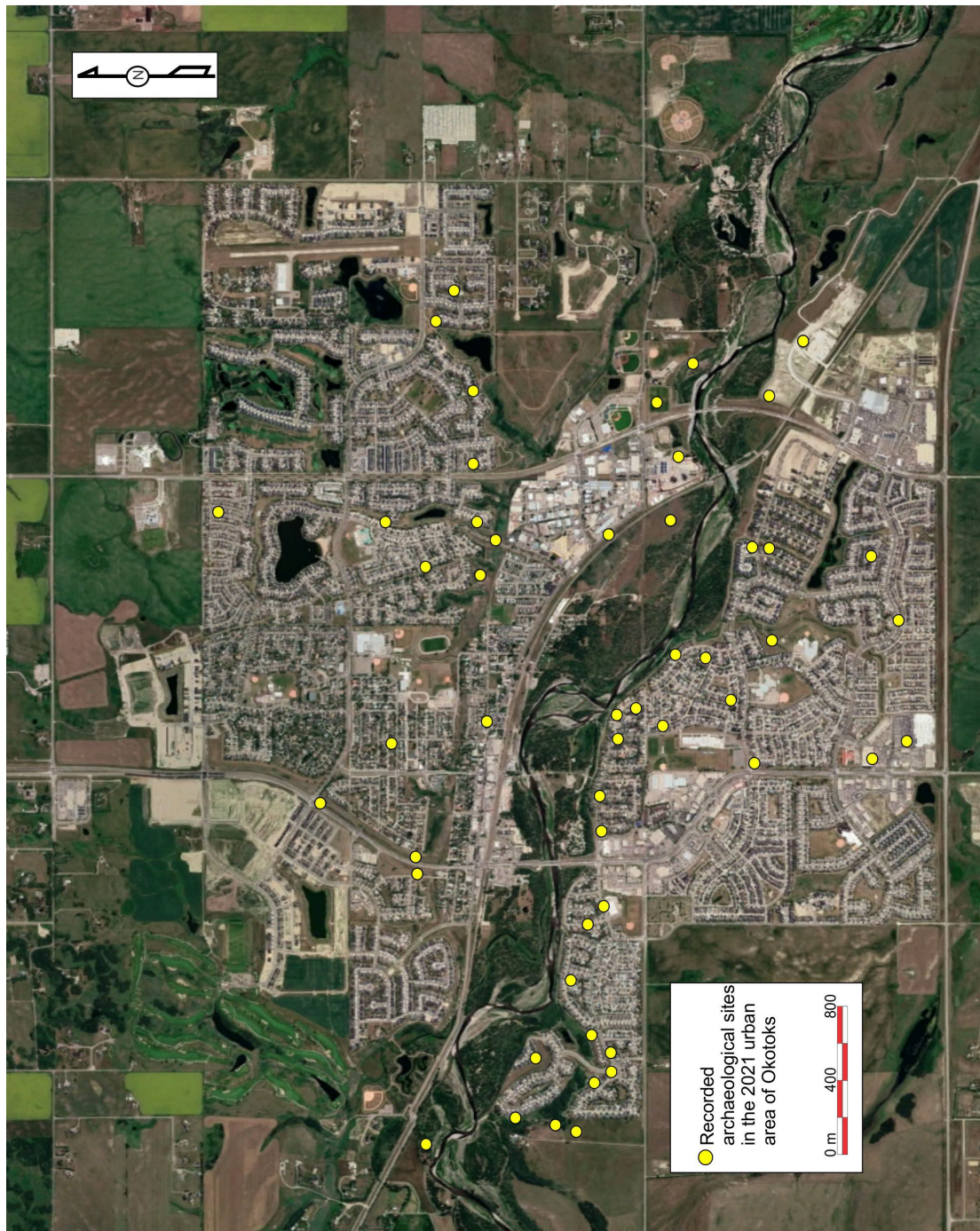


Figure 45. Location of recorded archaeological sites within and directly adjacent the Town of Okotoks. Almost of all of these sites have been disturbed by urban development. As of 2022, only two of the sites whose locations are shown here are considered extant and it is highly unlikely those two remain. They are located on private land in a residential area south of the inner valley of the Sheep River. Note the absence of near absence of sites in inner valley. This absence is relevant to the TKLUA and discussed below.

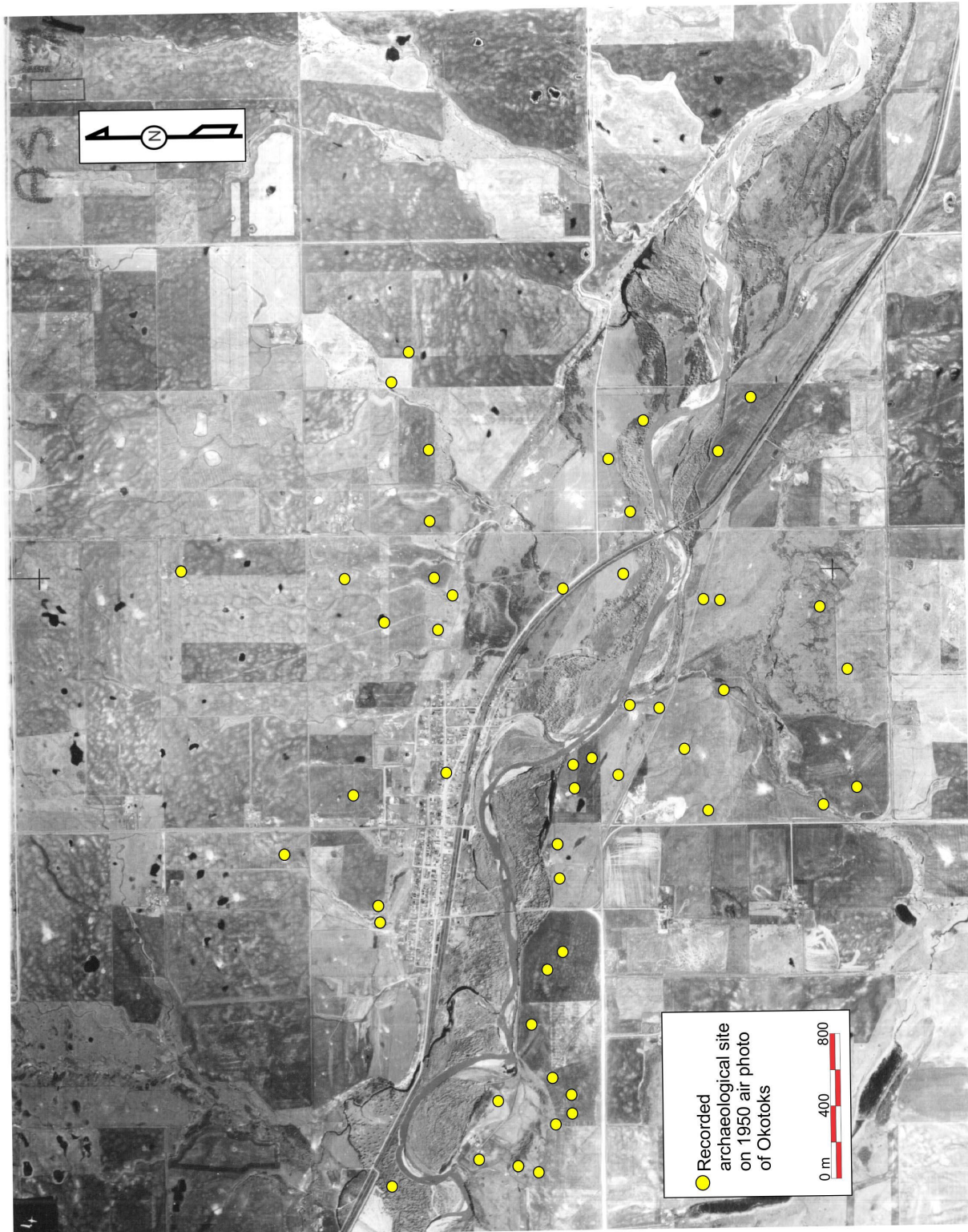


Figure 46. Recorded archeological sites in Okotoks area on a 1950 air photo.

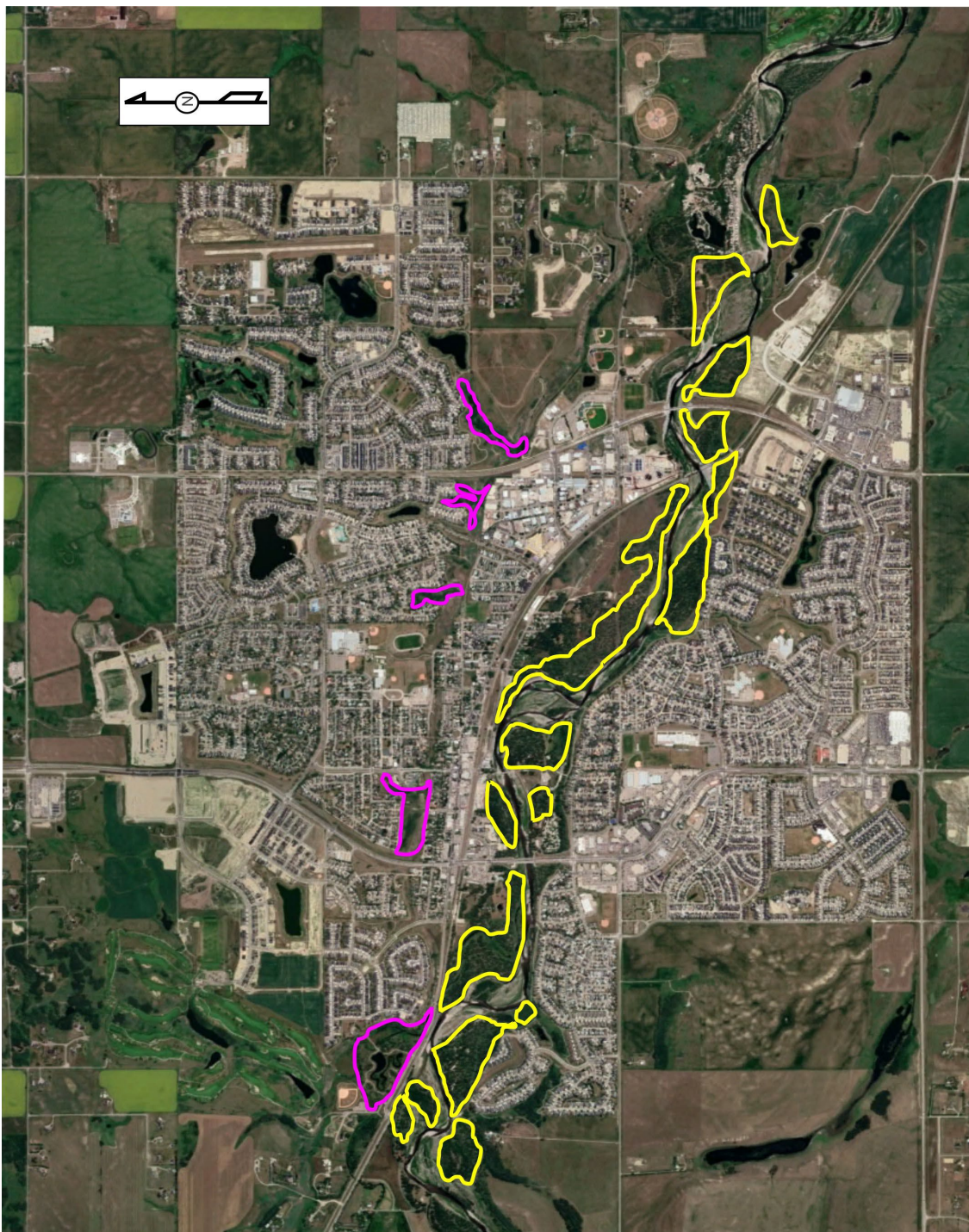


Figure 47. The yellow polygons shown in this satellite image of Okotoks are areas within the Sheep River valley in terrain that has had minimal human development and are more or less natural. The magenta polygons are less disturbed areas along the valley slope. These polygons do not consider land ownership. Some of the lands in these polygons are privately owned and some are owned by the Town of Okotoks. The relevance of these polygons to the TKLUA is discussed below.

The spatial distribution of the recorded sites in Figures 45 and 46 provides important information about the First Nations use and archaeology of the area. The recorded site locations are mostly outside of the inner Sheep River valley and most are on prairie upland adjacent to the valley. This recorded site distribution pattern is common in and near other river and stream valleys on the northern Plains. As has been outlined, it is the case, however, that inner river valleys were commonly used by southern Alberta First Nations for thousands of years. The Sheep and Highwood Rivers, among many others were important winter habitation places since they provided fuel, shelter, ready access to water and other important attributes. They also provided important plant and other resources during the warm seasons.

The low number of recorded sites in the inner valley and in that part of Okotoks where the landscape is less disturbed than the prairie upland is a function of two factors. Firstly, the absence of large-scale development in the inner valley means that there has been little or no archaeological investigation there and therefore no sites have been recorded. Secondly and more importantly natural processes? in the inner valley, including dense surface vegetation and accumulation of sediments in the inner valley through flood and other depositional processes, mean that sites are often preserved but are buried in sediments and not visible at the modern surface. These sites have thus far escaped detection.

This in turn means that the inner river valley is likely to have intact evidence of past human occupation that may go back thousands of years. The traditional importance of the plants from riparian gallery forest trees to small herbaceous and other plants that remain in the undisturbed parts of the river valley is significant, but so is the area's potential to contain other important historical information. The inner valley's potential to contain material culture remains left by First Nations occupation is not the same from one area to another. That potential depends on patterns of past land use and the geomorphological evolution of the river valley over the last many thousands of years.

The area has high potential to contain intact cultural remains from the pre-reserve period based on First Nations own history and accounts of use of the area, as well as results of archaeological research carried out in inner valley areas throughout the Great Plains.

The yellow polygons shown in Figure 47 have been identified as areas that have or have high potential for historical and traditional resources including, recorded and unrecorded areas of important traditional plants and historical resources. Any extant historical resources, such as habitation sites, resource acquisition sites or ceremonial in this area are likely to be buried beneath the modern surface. The magenta polygons have limited potential for important traditional plants but have potential for buried historical resources. This inference is based on the geomorphology, the apparent lack of significant subsurface disturbance in these areas and the distribution of recorded historical sites within the Town. These polygons are provided for reference purposes. This TKLUA is essentially limited to Town lands and some of the polygon areas are privately-owned. These areas were delineated on the basis of remotely sensed data and only portions of Town owned lands were subject to any on-the-ground assessment.

An important part of the TKLUA was a search for and evaluation of traditionally important plants in the river valley. We list a number of important plants that exist or are likely to exist on the undisturbed surfaces along the Sheep River. We also provide detail on some uses of the plants, but many plants were used for multiple purposes and we generally report only the most common.

Traditional land assessments often include information about culturally important animals however since this TKLUA was completed for an urban area, we do not comment further on those here. Notwithstanding that, it should be noted that there are still many species of native animals including birds and other non-mammalian species that use the area. Apart from a small urban deer population, the economically and culturally most important animals, such as, but not limited to, bison, elk, moose, bear, wolf, large felids, and smaller fur bearing mammals are either gone from the area or are at best, sparse in what is now

Okotoks. It should however be remembered that all naturally occurring animals and plant species were and are culturally important to Indigenous people even if they were not part of the traditional economy. Animals in general play an out-sized role in myth, legend and history of First Nations and Indigenous people in North America and people of the northern Plains are not an exception in this regard.

Traditionally Important Plants of the Okotoks Area

This element of TKLUA was, as stated previously, limited to the undisturbed or minimally disturbed portions of the Sheep River Valley within the Town of Okotoks. Although other small and apparently minimally disturbed lands were viewed, none were examined in detail. The project team considered the settings of undisturbed areas and on the basis of traditional knowledge, inferred the likely presence of traditionally important plants in these areas. Lands in the Okotoks annexation area were partly viewed via a driving survey, however, since almost all of these lands have been subject to agricultural, commercial and residential development, none of the area was subject to detailed pedestrian survey. This discussion of the results of the plant-based survey includes examples of culturally important plants that are likely to occur on any undisturbed tracts of land in the annexation area. Having said that, the focus of this section concentrates on the important plants in the river valley. Figure 47 shows the general area. Note that this image does not show the actual survey area which was more limited in extent due to the presence of private land and the density of vegetation but illustrates the area in which the majority of plants discussed herein occur. Some of the areas examined had clearly been impacted by past disturbance such as tree clearing, but these areas have been partly recolonized by native vegetation. Although we regard much of the river valley vegetation to be natural, the biological community as it currently exists undoubtedly reflects the impacts of modern human populations and economic activity. For example, the extent and density of vegetation is significantly different than it would have been a few centuries ago, when the area was heavily used by populations of bison, moose, elk, other deer species, and other animals, the predator animals that relied on them, and by birds, reptiles, amphibians and

insects. Past Pre-Contact cultural activities would also have impacted plant density and species distribution.

Traditionally important plant had a variety of uses including, but not limited to, wood for lodges, furniture (such as willow backrests), food, tools (such as, bows, projectile shafts, handles, flint-knapping) medicine, cosmetic uses and ceremony. The extensive use, cultural and economic importance of plants to southern Alberta First Nations and other First Nations, especially those on the Great Plains is often overlooked by non-First Nations people, at least partly due the reliance on bison as a primary socioeconomic resource and it is also due to the bias of non-First Nations historians, ethnographers and other writers. As an example of many such accounts, Kidd (1937), in an otherwise well-written summary of ethnographical and historical accounts written by others about Blackfoot culture, describes the Blackfoot “food quest”. While he uses about twenty pages, or 10% of his ethnography, to describe the food quest, only one and a half pages discuss plants, their acquisition and uses. This apparent minimization of the importance of plants is not Kidd’s. He only summarizes what many other writers preceding him stated. This does not reflect everyday life, practice or socioeconomy of southern Alberta Plains cultures, it does reflect the predispositions of most pre late-20th century descriptions, discussions and accounts of First Nations Great Plains cultures written overwhelmingly by European males. These accounts of First Nations cultures, economy and society do not generally reflect the everyday life and complexity of those cultures. Archaeological research on the northern Great Plains that examines elements of the food quest, also tends to focus on high-visibility remains such as major bison acquisition sites. Elders and other First Nation experts commonly emphasize the importance of plants and note that regardless of end of the bison era and the onset of the reserve and modern period, the use and importance of plants remains and will continue to be important long into the future.

In most discussions of Plains First Nations plant resources uses, plants for food are often discussed first and they were essential elements of diet, but their medicinal and

ceremonial functions were critical. Many plants including sweetgrass, saskatoon, chokecherry, aspen, willow, wild chives, yarrow, dogwood and wild rose all of which occur in and around the Sheep River Valley had multiple uses from food to medicine to use for tool production (Hellsen and Gadd 1974). Information on the importance and use of a number of plants known to occur in the Okotoks area are provided here. This information is intended to achieve two things: Firstly, to generally illustrate the importance and significance of plants to all southern Alberta First Nations both in the past and present and secondly to promote and encourage the preservation and protection of these and all naturally-occurring native plants in the Town of Okotoks.

According to Moss (1983) and Johnston (1987), there are just under 1800 known vascular, that is, flowering plants, conifers and ferns both native or non-native but established plants that grow wild in Alberta. According to Johnston (1987: 10), of the approximately 1400 plants collected from Alberta and in the Lethbridge Research Station's (now called the Lethbridge Research and Development Centre) herbarium over 800 were collected from southern Alberta south of Calgary.

Over the period that humans have been here, the density, distribution and variety of plants in a given location would have changed with climate change and other factors. Between 100 and 150 species were used by First Nations people and considered important to everyday life and for ceremonial, religious and spiritual purposes. Approximately 40% of traditionally-used plants occur in Fescue Grasslands and Foothills Parkland Natural Sub-Regions of southern Alberta and many occur or are likely to still occur in the undisturbed and minimally disturbed lands in and around Okotoks. Hellsen and Gadd (1974) who relied heavily on Elders for information contained in their book on plant use listed approximately 80 plants that were important and commonly used by southern Alberta First Nations for food, medicine, tools, ceremony, cosmetic and other purposes, but the total number of plants used is substantially higher.

Plants native to the boreal, alpine and subalpine areas north and west of Okotoks do not occur here and xeric-adapted plants located on the dry grasslands in the southeast quadrant are not present as native species, but the western prairies and foothills zones are noted for the variety of culturally important native plants and people would have been drawn to the Sheep River valley and surrounding prairie at least partly to its floral richness and variety. The location of Okotoks in an ecotone between grasslands to the east and parkland to the west is notable for the variety of native plants. The following list of plants were either observed or, again on the basis of Elder and expert knowledge and experience, are inferred to be present in the river valley and undisturbed brush or grassland areas in the Town. The discussions and descriptions of plant uses are from published materials, and Elders and experts that conducted fieldwork and participated in discussions for this TKLUA. The uses and significance the plants as presented below should be considered an overview only. Elders knowledge of these plants and their many and varied uses is far more complex and extensive. The data here are considered more or less common knowledge. The following summaries are based on information passed on by First Nations Elders and experts, both during this TKLUA and to other recorders over more than the last 50 years, where that information was available to us in the course of research done for this report.

Plant Descriptions and Uses Summary

The following section provides specific information on traditional plants that are known to occur in and near the Town of Okotoks. There is no intention to list plants here according to their relative importance or cultural significance. Many plants were used for multiple purposes and described below. This discussion does not include all plants in the project area that would have been used traditionally. Rather we provide a cross section of plants and their uses again to illustrate the importance of the area for the plant resources it provided to humans for thousands of years.

Willow and other willow-like plants

Willow species are common in the river valley and many willows had important economic and other uses. The following list of willows is not exhaustive, but all the varieties listed here were either observed or inferred to be present in the Sheep River Valley through Okotoks. Various willow species were used in many ways, some of which are described further below.

Pussy willow (*Salix discolor*)

Pussy willow (*Salix discolor*) is present in the area is one of a number of willows that contain *salicin*, an effective painkiller and anti-inflammatory and was used widely by First Nations. Willow bark continues to be used for its pain reducing and other properties. Aspirin (acetylsalicylic acid) is a synthetic salicylate. Salicin in willow is a natural salicylate. Pussy willow stems were also for backrests, tipi pegs and pins to keep tipi doors closed, the production of red dye and the tannin in its bark to tan hides.



Figure 48. *Salix discolor*, one of several species of willow often called pussy willow occur in the Sheep River Valley. The roots of this willow variety were dried, crushed and mixed with water and other ingredients to make hair straight and sleek, and spring buds were used as a red dye. The plant had a variety of other purposes. This image shows it in spring in southern Alberta.

Yellow willow (*Salix lutea*)

Many willow species such as yellow willow have edible parts. Yellow willow (*Salix lutea*) bark can be collected when fresh, dried and used as a flour and its leaf buds are highly nutritious and rich in vitamin C. Southern Alberta First Nations understood their nutritional value and although not a major dietary component would have formed a component of their food, especially in spring. Buds and leaves could be cooked and added to stews and soups. In addition to its use as a food plant, its stems and larger branches were used for backrests and sweat lodge frames.



Figure 49. Yellow willow in spring. The plant's name is derived from the yellowish colour of its branches. Courtesy of Mary Ellen Harte, Bugwood.org, image 1353236.

Narrow-leaved or sandbar willow (*Salix exigua*)

Sandbar willow is very common on gravel bars along the Sheep River in the Town. A very large patch is present along the river just south of the former Bible camp lands. This willow

is commonly used as a sweat lodge frame. First Nation sweats were used both for actual and spiritual cleansing and the sweat lodge is an integral element of most First Nations culture. Other varieties of willow were used as sweat lodge frames, but sandbar is commonly used for this purpose. Sandbar willow stems were picked, debarked and partly shredded and used as toothbrushes or chewing sticks. Many plants were used for this purpose by all cultures prior to the manufactured toothbrush, but sand willow stems were commonly used by southern Alberta First Nations.



Figure 50. First Nations Elder and experts examining sandbar willow patch along Sheep River in Okotoks.



Figure 51. Traditional style Plains willow backrests.



Figure 52. Traditional Willow frame sweat lodge southern Alberta, early 1900s. Willow's use for sweat lodges is and was very important. Different societies of southern Alberta First Nations used different numbers of willows to construct sweat lodge. The sweat lodge is and was an important element of southern Alberta First Nations for ceremony and it is therefore important that lodges were constructed with attention to the user's societal obligations and practices. Courtesy of Glenbow Museum Archives Photographs.

Beaked willow (*Salix bebbiana*)

Beaked willow is common willow in the aspen parkland and foothills of southern Alberta and it occurs in the Sheep River valley. The inner bark was collected and chewed to combat infections and promote healing of wounds such as cuts and scrapes. Large branches were collected and made into decorative staffs and sticks. In southern Alberta beaked willow is a variety that forms diamond-shaped patterns due to infection by fungi. These patterns were and are considered attractive and still used by First Nations and others. It is one of the willows commonly identified as a diamond willow when it is impacted by the infecting fungi.



Figure 53. Stripping willow bark, possibly to produce decorative willow staffs, early 20th century. Courtesy of Glenbow Museum Archives Photographs.



Figure 54. Beaked willow in Sheep River valley.

Wolf Willow (Eleagnus commutata)

Wolf willow bark was peeled and weaved to make rope. Short, braided bark whips were used by children to twirl stone tops on ice as a winter game. A stone tea made from the bark and mixed with grease or other lotion was used to treat frostbite and sunburn. Wolf willow produces small berries with tough skins, but the berries could be peeled and eaten and they were added to soups. Berries mixed with fat and frozen was eaten as a treat in winter. The berries were also used as beads. Wolf willow has grey-silver leaves, fragrant flowers and is easy to recognize. It is widely distributed in southern Alberta, but it is more common in moister areas along streams and rivers in the foothills and western grasslands of southern Alberta. Like red osier dogwood, wolf willow is not a true willow but commonly co-occurs with other true willow species.



Figure 55. Wolf willow (grey leafed plant) in dense vegetation along a Foothills stream valley. Note how the grey leaves stand out and are easily recognized.

Red osier dogwood (Cornus sericea)

Red osier dogwood is one of several plants that are called red willow and like wolf willow is not a true willow, that is, in the genus *Salix*. Red osier dogwood commonly co-occurs with willow species. Straight branches of this plant were used to make backrests; 110 lengths were needed for one according to Elders. Some First Nations scraped the inner bark of this plant mixed it with tobacco and other plants for smoking. It has no flavour but contributes a pleasant aroma to the smoke. The plant's roots were used to make

medicinal tea to treat a variety of ailments. The flexible branches can be woven for baskets and other purposes. Red willow produces a small berry with a slightly bitter, sour taste, but it can be eaten. According to Hart (1996: 39), some people mixed saskatoon and red osier dogwood berries and called the dish “sweet and sour” after the contrasting tastes of the mix. According to Hellson and Gadds (1974:111), the Blackfoot have a Napi story that tells why the bark of this plant is red.



Figure 56. Red osier dogwood.

Berry-bearing plants used for food and other purposes

Berry plants were critically important dietary plants for southern Alberta First Nations and other parts of widespread edible berry-bearing plants were used for a variety of purposes. The most important native berry plant in southern Alberta, common in the Sheep River Valley is saskatoon. Other plants such as chokecherry, buffaloberry and gooseberry all of which occur in the project area are also important.

Saskatoon (Amelanchier alnifolia)

The saskatoon is a nutritious berry plant common throughout the plains and foothills. Its ubiquity and relatively long season of utility, the fact that it can be easily preserved and its high nutrient content mean it is one of the most important plants to First Nations in this area. According to Elders, saskatoon was an important complement to the normal high protein meat-based diet of bison hunting cultures of the Plains. It is said to aid the digestion of animal protein and keep people's veins and arteries clear and open. When mothers were nursing their children, saskatoon berry tea was consumed to pass its medicinal properties onto their children. Berries were harvested when they ripened in summer and eaten fresh and dried and were used as ingredients with soups, stews and other prepared foods. Saskatoon berry soup is still a featured menu item in southern Alberta First Nation feasts. Cold berry soup is considered a delicious drink. Saskatoon is an important part of many ceremonies. Its branches were important for use for tools including arrow shafts, pegs and buttons. Saskatoon branches also make good pipe stems and berries were crushed and used as a dye.

Pemmican, dried, usually smoked and pounded meat, melted fat, dried saskatoons and often other berries and flavouring herbs was a critical and long-lasting jerky type dish that preserved for months. It was an important winter food and it was light to carry, but calorie dense. The word pemmican is Cree and the most commonly used name now. The Stoney-Lakoda word for pemmican is *wasna*, and Stoney-Lakoda also produced a corn-based version. The Alberta Stoney people had close cultural connections with the Soian speaking Nations of the eastern Plains in what is now the U. S. and probably traded bison for corn and other goods in the Precontact period.



Figure 57. Elder examining saskatoon berry bushes and other plants in Okotoks, north side of Sheep River.



Figure 58. Ripe saskatoons in western foothills of southern Alberta.



Figure 59. Traditional method of sun drying saskatoons. This photo was taken ca. 1920 of a Tsuut'ina woman. Courtesy of Glenbow Museum Archives Photographs. Image also published in Hellson and Gadd (1974) and Johnston (1987).

Chokecherry (Prunus virginiana)

Chokecherry, like saskatoon is ubiquitous in the Sheep River valley in Okotoks and widespread in the foothills along drainages and in moist areas on the open prairies. Chokecherries are not calorie dense, but contain important minerals, vitamins and other micronutrients. They were therefore an important dietary item for First Nations in this area. They were also used in pemmican and other dishes like soups and stews. The berry was also to make tea to treat coughs, colds and pneumonia and inner bark was used as an analgesic. Dried chokecherry root was used to stop bleeding. Wood from the chokecherry bush is a very important traditional tool making material. The wood is hard and does not burn easily and was used to make bows and arrow shafts. Fine branches could be shredded on ends and used as a paint brush and forked branches were used to move stones and remove hot material from fire pits. Chokecherry wood was used to produce pipe stems, tent pegs and as handles for pounding or chopping tools. A forked chokecherry stick was used in “incensing” where hot coals would be removed from a fire specifically with a chokecherry stick. The coals were then used to place the rocks in a

cleared place (altar) and sweetgrass, sweet pine (alpine fir) or other incense plant was placed on the rocks. People and ceremonial objects could be “incensed” in specific ceremonies (Hellsen and Gadd 1974: 6).



Figure 60. Crushing chokecherries in the traditional manner. This photo shows the same Tsuut'ina person as Figure xx. Courtesy of Glenbow Museum Archives Photographs. Image also published in Hellsen and Gadd (1974) and Johnston (1987).



Figure 61. Chokecherry wood
Incense tongs from Glenbow Museum
Collection, original photo courtesy
Glenbow Museum, photo republished
from Hellsen and Gadd 1974: 123.



Figure 62. Piikani man with tongs and shield. Note the similarity of the tongs with image on preceding page. This portrait with tongs and a shield suggests the ceremonial importance of the tongs and by inference, the man's probable high status in his community. Although this is clearly a portrait, it provides relevant insights into the culture and history of this man identified as Whistle Smoke. Photo by E.S. Curtis, ca. 1920, courtesy Wellcome Collection.



Figure 63. Ripe chokecherries, Sheep River Valley.



Figure 64. This is an example of in-studio photo from 1886 attempting to show an image of a First Nations person in the pre-reserve period. Regardless it is likely this man is holding a bow made from chokecherry, this type of bow would have been in use after the southern Alberta First Nations acquired horses.



Figure 65. Wild strawberry plant

Wild Strawberry (*Fragaria virginiana*): Wild strawberry was eaten fresh but not preserved. Leaves of the plant were either by themselves or mixed with other plants used to make tea. Wild strawberry occurs widely in the region. Wild raspberry (*Rubus idaeus*) was not observed in the project area is likely to occur and like wild strawberry was eaten fresh and was not preserved.

Silver buffaloberry (bullberry) (*Shepherdia argentea*)

Berries from the buffaloberry, were eaten, dried for winter use, made into soup and tea and used to make a red dye for hides (Johnston 1987, p. 48). The berries are more edible and sweeter after a frost and were therefore collected in the fall. The buffaloberry has a thorn that makes them somewhat more difficult to pick, but when the berries are ripe, they are only lightly attached and hitting the buffalo berry with stick results in the berries falling off onto a hide laid under the bush. Buffaloberry occurs widely in river and stream valleys including in the Sheep River Valley. Hellson and Gadd (1974: 105) state the berries are bitter and were eaten only if necessary, however Elders that participated in this survey, said the berries were tasty and important, again following a frost with a sweeter taste.



Figure 66. Ripe buffaloberries after the first frost. These berries were collected relatively late in the year compared to other edible berries on the northern Plains.

Gooseberry (wild currant) (Ribes oxycanthoides)

This was one of the first berries to ripen in summer and were eaten fresh, sometimes boiled and were added to soups and stews. The berries had some uses as a medicine and an extract of the berry was an ingredient in soap.



Figure 67. Gooseberry in spring with blooms just starting to emerge.

Other important traditional plants

The following important plants are not categorized by type or species but include important traditional plants that occur in the fescue grassland and foothills parkland of southwestern Alberta. These plants listed were either observed in the Town or inferred to be present here in undisturbed valley bottom and slope lands. We have not included traditional plants that occur on open native upland prairie grasslands since there is very little extant prairie grassland within the Town.

Sweetgrass (*Hierocloe odorata*)

Sweetgrass an iconic southern Alberta traditional plant and it remains a very important plant for ceremonial purposes here. It is also important for utilitarian reasons. It is used as incense and as a smudging plant. Elders state that, like other ceremonial plants, sweetgrass must be used with respect and care must be taken that it is used properly since it has special powers and is considered a sacred plant. According to some Elders ceremonially important plants may have their uses restricted to certain societies or people that had the authority to use it. Sweetgrass is now and may always have been a special or sacred plant, but one which was available to anyone to use. Sweetgrass used in smudges, other ceremonies and as offerings is braided.



Figure 68. Braided sweetgrass.



Figure 69. Sweetgrass with red tie, under rock left as an offering at a special site in southern Alberta.



Figure 70. Sweetgrass, southern Alberta foothills area.

Sweetgrass has other non-ceremonial uses. It was used to make a tea for sore throats and colds and to reduce pain for some problems. Strong sweetgrass tea helped chapped skin and soreness. The tea was also used on the hair to make it shiny and sweet smelling. Some used it to treat saddle sores on horses and horses were occasionally fed sweetgrass since it was thought to improve a horse's endurance. Sweetgrass was also used for cosmetic and decorative purposes by weaving into a band to be worn as a headdress and/or make small wreaths for decoration.

Sweetgrass grows throughout the grasslands and foothills of southern Alberta in wetlands, around ponds, sloughs and lakes, and moist streambanks. Sweetgrass was noted in the Sheep River Valley in Okotoks during field survey. Sweetgrass and wild mint can co-occur.

Wild mint (Mentha arvensis)

Wild mint is used for a variety of purposes. It was dried and used to make tea and to flavour pemmican, fresh meat, soups and stews. It was used to repel insects and often added to foods like pemmican that was packed to keep insects away from it. It was used medicinally to treat sore throat and Elders have indicated its use as heart medicine. Mint was also used to keep insects away and animals away and was packed with food for that reason. It was rubbed on traps and other equipment to cover the scent of humans. Chewing mint leaves was considered pleasant and served as a breath freshener. It occurs in moist open areas and is present on lower terraces of the Sheep River.



Figure 71. Wild mint, southern Alberta foothills area.

Aspen (Populus tremuloides)

Aspen is widespread and common in the Foothills and Parkland and is used for a variety of purposes by Blackfoot, Stoney-Nakoda and Tsuut'ina people. According to Hellson and Gadd's (1974: 29) Blackfoot informants, the centre pole for Okan, the Holy Lodge of the Sun Dance was originally aspen, but other varieties of poplar have been used more recently. Its cambium layer was eaten particularly by children as a snack and new buds were used to make tea. When the tea is reduced it could be used as a perfume for people, clothing and other possessions.

Aspen bark commonly consumed by large ungulates in winter in southern Alberta was also used by First Nations as food for horses and this would have been an important food for horses during winter when grazing was impaired by snow cover.



Figure 72. Aspen in early spring, southern Alberta foothills and are present in the Sheep River Valley around Okotoks. Dead aspen branches and standing dead trees would have been an important fuel source in winter camps.

Buffalo bean (Thermopsis rhombifolia)

The role of the buffalo bean as a natural indicator of the spring bison hunting season is discussed in a previous section of this report (Figure 16 shows a buffalo bean). The buffalo bean is inedible and was considered to be poisonous, but the flowers were picked and mixed in hot water to form a yellow fluid and items were soaked in the fluid to turn them yellow. Skin bags and arrow shafts are examples of items that were dyed with buffalo bean. A very weak tea was used to soothe stomach pain, but the tea had to be made by an expert to avoid being poisoned by it. It grows widely in southern Alberta in open, moist grasslands.

Yarrow (Achillea millefolium)

Yarrow was widely used as a medicinal plant by southern Alberta First Nations and many others. In describing its use by many North American First Nations and others, Hart (1996: 7), says “Yarrow is a medicinal wonder”. It was used widely as a hemostatic, that is, an

aid to blood clotting to treat cuts and wounds. Yarrow leaves were crushed and mixed with water or chewed and used to wrap wounds. It was also used as a disinfectant and promoted healing and applied to sores. Leaves were boiled to make a solution that was applied to sore muscles. Dried yarrow was also used as perfume. A rub from an infusion made with the plant was used to treat sore eyes in both humans and horses.



Figure 73. Yarrow plant in bloom.

Wild rose (Rosa spp, mostly R. acicularis in this area)

The berry of the rose (rose hip) was eaten fresh or dried and mixed with fat and dried meat. Some regarded the rose hip as a famine food and it was not eaten in large quantities. Frozen rosehips were considered a winter treat. Rosehips are rich in vitamin C and other vitamins. Rosehips were mixed with mint to make a vitamin rich and pleasant tea.



Figure 74, Prickly rose in foothills of southern Alberta.

Table 1: Additional traditional plants that may occur Okotoks. These plants may occur within the town limits. These plants are considered less likely to be present on Town lands than the others listed herein, but are known in the general area and, like many of the plants listed above, had a variety of uses.

Plant Name	Summary of Use, Comments
Arrowleaf balsamroot (<i>Balsamorhiza sagittata</i>)	Immature flower stems and seeds are edible. Roasted seeds are said to taste like sunflower seeds. The root is tough and woody but were edible when baked for several hours in a fire pit. The broad leaves were used as a poultice. This plant is common in the foothills, mostly on dry slopes.
Cow parsnip (<i>Heracleum lanatum</i>)	A tall plant belonging to the carrot family. The stem and root were consumed. Stems would sometimes be cut into small pieces, dipped in blood and stored for use in soups and broths (Helson and Gadd 1974). Ashes of the leaves and lower stems could be used as a salt substitute (Johnson <i>et al.</i> 1995: 153). Cow parsnip is common in moist forested areas and along stream banks in the foothills of southern Alberta.
Double root, yampah (<i>Perideridia gairdneri</i>)	Double root or yampah is a member of carrot family and has highly nutritious roots. Indian turnip is rich in sugar, Vitamins A and C and potassium and is said to have a sweet flavour (ibid). The roots were consumed raw or boiled and were used as a constituent in soups. The raw root is said to taste similar to carrot. A smudge made from the root is said

	<p>to relieve coughs and tea made from the root, soothes a sore throat</p> <p>Yampah occurs in moist grassy meadows and open areas in woodlands in the foothills. Yampah is no longer common in southern Alberta and should be protected when present in a natural area.</p>
Bergamot, horse mint, purple bee balm (<i>Mondara fistulosa</i>)	<p>Bergamot was used as a medicinal plant. Leaves were boiled and mashed and used to treat cuts, sores and other skin blemishes. Tea made with the leaves was thought to relieve coughs.</p>
Nodding and prairie onion (<i>Allium</i> spp.)	<p>Bulbs were eaten raw and were added to stews and soups, fluid made from the plant is thought to have antiseptic properties and is added to material covering cuts and wounds. A smudge made from the bulb was inhaled to clear sinuses and relieve common cold symptoms.</p>



Figure 75. Arrowleaf balsamroot.



Figure 76. Cow parsnip.



Figure 77. Double root, yampah.



Figure 78. Wild bergamot, horse mint, purple bee balm.



Figure 78. Nodding onion

RECOMMENDATIONS

The following recommendations relate to the traditional, historical and cultural significance of the Okotoks area to the Blackfoot, Tsuut'ina and Stoney First Nations. A TKLUA can have multiple goals, outcomes and purposes. In the case of the Okotoks TKLUA, the primary goals were to:

- 6) Identify extant traditional resources within the town.
- 7) Help to identify undisturbed or minimally disturbed areas that had potential to contain traditional resources even if specific resources were not identified in those areas.
- 8) Provide information and data on traditional resources and traditional resources potential in order to help protect and preserve those resources for all people.
- 9) Increase awareness in Okotoks of the area's historical and cultural importance for First Nations whose territories include the land occupied by the Town.
- 10) Help Okotoks recognize and honour the 12,000 years or more years that the area has been the home of southern Alberta First Nations.

The recommendations provided here are also intended to improve awareness of the resulting effects from past efforts of cultural assimilation. In so doing, we have addressed some of the Truth and Reconciliation Commission's Calls to Action that are within Okotoks means to support, such as promoting preservation of languages. We wish specifically to acknowledge the Town of Okotoks' leadership in its effort to address the recommendations of the Truth and Reconciliation and the principles of the United Nations Declaration on the Rights of Indigenous Peoples.

A Culture, Heritage and Arts Master Plan for Okotoks (Okotoks, 2018) notes a number of actions for Okotoks. Some of the recommendations that are included herein directly or tangentially address those actions. There was no specific intention to include recommendations in this TKLUA that were directly related to that plan. The fact that recommendations herein and in the *Okotoks Culture Heritage and Master Plan* are similar in many respects is relevant since it demonstrates that Okotoks and its citizens are

receptive to many of the recommendations herein. We do include a recommendation for some amendment to the Master Plan. The *2018 Municipal Heritage Designation Program* (Okotoks, J. M. Gartly Design Studio, 2018) was not examined in detail during research for the TKLUA, however, we do recommend herein an addition to that document to specifically recognizes First Nations heritage values within the Town.

The recommendations are not presented in order of significance, and some are more far-reaching and complex than others. Many recommendations are linked to others, but each is a stand-alone piece that can be implemented without those to which it is linked. While some of the recommendations are not specifically linked to the history and land use of the Okotoks area, all are considered steps in acknowledging the human history of the region for the last 12,000 years and recognizing the importance of this area to southern Alberta First Nations both in the past, present and future.

Recommendation 1

Establish a process for future consultation with Blackfoot, Tsuut'ina and Stoney experts to assess impacts of future development in Okotoks' current and on all future Town-owned Natural Area Districts and to help guide mitigation efforts for such developments and other disturbances. We understand the intent is to maintain the natural environment of the area, but examples of disturbances that should be preceded by such assessments include the installation of new trails or paths, recreational facilities such as benches or picnic tables, any future flood mitigation or flood impact reduction measures and any activities that have the potential to have a negative impact the natural vegetation in the area.

Recommendation 2

Undertake regular or semi-regular vegetation sampling within identified Natural Area Districts (as shown on the 2022 Town of Okotoks Land Use Map) and any additions to those districts in the future to search for and identify invasive plant species that may replace native vegetation therein. Invasive and potentially noxious plants are

common in urban areas in southern Alberta, and since the Natural Area Districts in Okotoks are largely surrounded by urban development, it is considered important to control invasive plants in these areas, since invaders can disrupt native plant communities in urban areas.

Recommendation 3

Notwithstanding Recommendation 2, and where possible and practical, the Town should record the general location and situation (plant condition, patch size, potential threats) of traditional plants on Town lands in the Sheep River Valley in order to help preserve and protect them. A list of traditional plants subject to recording should be developed in consultation with First Nations. It is not the intention of this recommendation to document every plant, rather to identify significant patches that can be preserved and to note the presence of uncommon traditional plants such as double root. If sufficient patches are present, limited harvesting, possibly as demonstration events, could be undertaken, however the object of the incentive is to protect and preserve important plants in their native habitat and ensure they are not damaged during development activity. A record of the relative health of these species that have been used for thousands of years could be a valuable proxy indicator of the overall health of the natural environment and habitat in the river valley in Okotoks.

Recommendation 4

Encourage and facilitate the replacement of non-native species in parks and open areas with appropriate species native in the local area where possible and practical. For example, in park areas/green spaces on the prairie upland, replacement species should be native to the fescue grasslands of western Alberta. For spaces within the river valley, species native to foothills parkland and riparian gallery forests should be used. Where possible, native species of cultural use or importance to First Nations should be considered. Consultation with First Nations plant experts should precede such undertakings to determine appropriate plants. Again, where possible

and practical, signage indicating their status, cultural significance and use could be noted, including plant names in one or more of regional First Nations languages. This recommendation would work toward achieving Goal 1 of the *Town of Okotoks Environmental Master Plan* (Okotoks 2018a).

Recommendation 5

Consider development of one or more heritage plant gardens or spaces within an existing or new parks or open spaces. We do not recommend using existing undisturbed natural areas for a maintained garden or garden space, rather an existing open space now planted to non-native species could be converted to such a use. If more than one space is suitable for such an undertaking, we recommend one in the prairie upland ecological area of Okotoks and one in the Sheep River Valley ecological area. These gardens would not necessarily be undisturbed natural areas, rather we envision them as planted to traditionally used plants that are compatible in the given space. Consultation with traditional plant experts is recommended if this initiative is undertaken in terms of appropriate plants and providing explanations regarding plant uses. Plant uses and their value as important resources could be stated on signs and/or plants could be identified with their English and First Nations language names. Depending upon the number of a given plant species, they could be harvested for demonstration events, for example collection and braiding of sweetgrass and making tea from wild mint and other plants.

Recommendation 6

Consider developing a small notebook or pamphlet showing important traditional plants and some of their uses and make them available on walking trails or other convenient places. Encourage people to search out and record instances of the presence of the important traditional plants in natural terrain, with appropriate cautions not to disturb or pick them. Such an exercise could be geared toward a task or mission to search out and note those plants with photographic or other

evidence and completion of a mission could be recognized by the Town with a token reward from the Town.

Recommendation 7

Encourage residents to plant traditional species in their yards and gardens and to learn about their use by First Nations people. Many native plants such as yarrow, bergamot, wild rose and cow parsnip are showy and attractive plants and are already sold as such by local nurseries.

Recommendation 8

Encourage private owners of designated Natural Area District lands in the Town to maintain native or minimally disturbed vegetation wherever possible. We do not specify any Town actions that could assist or provide an incentive to private landowners to take appropriate measures, but we encourage such incentives where possible and practical.

Recommendation 9

A limited area TKLUA should be undertaken, either as an addition to this report or new report, when direct field access to the undisturbed or minimally disturbed public lands in the Annexation area is available. We do not recommend a full report with background and contextual information, rather the TKLUA should be limited to field examination and reporting of results along with any concomitant recommendations specifically related to those results.

Recommendation 10

The Old Macleod Trail historic trail segment designation and description in the Town of Okotoks should be expanded to include its inferred role as part of the Old North Trail. It is our recommendation that to record it as an important traditional cultural resource under the *Alberta Historical Resources Act*. Only First Nations are able to designate traditional cultural resources, we recommend that the Town work with

First Nations to determine the advantages and implications of such a designation. Since the Trail segment is not on crown lands, the Town would need to facilitate that designation.

Recommendation 11

Regardless of Recommendation 8 for its designation as a traditional culture resource, the Town should amend the current description of the Old Macleod Trail in the Alberta Register of Historic Places (Alberta Register of Historic Places, Macleod Trail Cultural Landscape 2022) to include a discussion of the Old North Trail and why that is significant. We recommend replacement of the phrase “local lore”, which typically implies something potentially less than substantive fact. Although as noted, there is no confirmed physical evidence, substantial, albeit indirect, archaeological evidence supports this location as part of the Old North Trail and First Nations historical accounts support the presence of the trail in this location. That history should be recognized as legitimate and meaningful. In so doing the town can demonstrate a commitment to the importance of oral histories. Evidence for location of the Old North Trail in or near the Town of Okotoks means it rises above a common interpretation of “local lore”.

Recommendation 12

Update the existing sign or add separate signage recognizing and identifying the Old Macleod Trail location as part or potentially part of the Old North Trail, along with a brief summary of what the Old North Trail was and is. If possible, we recommend the inclusion of First Nation art and/or language on the sign. In addition, we recommend consideration be given to erection of an Old North Trail interpretative sign near along a walking path or near the Okotoks Sheep River Bridge. We suggest consultation with First Nations experts on wording and potentially imagery if this sign is considered.

Recommendation 13

Identify new assets, particularly recreational areas or Natural Area Districts that could be given First Nations names. The recommended priority is to name at least one asset with a Tsuut'ina language name and one asset with a Stoney Nakoda language name. Following that, we recommend consideration be given to naming additional assets with other Blackfoot, Tsuut'ina and Stoney Nakoda language names. Establish a consultative pathway or process with First Nations that can be followed specifically for naming and language issues.

Recommendation 14

Provide a link or an in-site discussion for the Town's name on the Town of Okotoks web site. Although the source of the name is common knowledge in Okotoks and much of southern Alberta, it is less commonly known elsewhere and a brief discussion of the Okotoks Big Rock in both myth and science and its importance to First Nations and as a site of unique significance would help preserve First Nations history and culture.

Recommendation 15

Consider including Blackfoot, Stoney Nakoda and Tsuut'ina language greetings on 'Welcome to Okotoks' or other welcome signs. Examples offered here are: "*oka otagach*" (welcome to all) in Stoney Nakoda; "*dadanst'ada*" (hello to all) in Tsuut'ina; "*Okí*" (hello to one or all) in Blackfoot (diacritics not shown in these examples). If this recommendation is implemented, consultation with speakers and/or language experts regarding the specifics of greetings should determine the most appropriate greetings. This recommendation does not address how to place these greetings. For example, we are not specifically recommending each language should be placed on all "welcome" signs. If multiple welcome signs exist or could be placed, one sign could have one First Nations greeting, another sign another language.

Recommendation 16

Revitalization and preservation of First Nation languages is an important element of the Truth and Reconciliation Commission's (TRC) Calls to Action (TRC 2015: 321-322). We recommend that Okotoks support preservation of Blackfoot, Stoney Nakoda and Tsuut'ina languages through the implementation of other recommendations here by encouraging both the federal and provincial governments to do the same. We suggest that the Town examine other steps it could take such as supporting and encouraging positive steps that the provincial and federal governments can and should undertake. An example would be facilitating or encouraging a Town facility such as the Okotoks Arts and Learning Campus to offer introductory First Nation's language lessons.

Recommendation 17

Establishment of a regular or occasional event highlighting First Nations history and culture in the region. This could occur in conjunction with other special events in the Town to educate, inform and entertain citizens and visitors. We note that Okotoks has supported occasional talks, demonstrations and other activities on First Nations history and culture and those could be regularized and/or expanded. A similar recommendation was made within the *First Nations History and Culture Study of the Bible Camp* report, and we recommended that, if possible, those activities occur in the Park. Further, additional events or actions could be undertaken elsewhere. For example, and although we do not make a specific recommendation here, an event in association with Orange Shirt Day or other notable date would be an appropriate time and given the time of year an indoor event at a town venue could be considered. Experts and Elders on the project field team made several suggestions for such events: Storytelling, where Elders or knowledgeable people would tell stories of their history inside or on walking tours in some of the easily accessible natural area; nighttime discussions of First Nations astronomy. Astronomy was an important part of First Nations culture. Other examples are Demonstrations of traditional plant

harvesting and preparation for use, teaching drumming, toolmaking, traditional beadwork and other crafts.

Recommendation 18

We recommend minor amendments or additions to the *Culture, Heritage and Arts Master Plan* to reflect Okotoks' First Nations heritage and culture. We recognize the vision of this Master Plan and view it as an important element in Okotoks' culture, heritage and arts initiatives. The following comments are intended to complement the Plan, not alter it in a fundamental way. The recommended amendments or additions are:

Action B4. Include First Nation heritage and culture sites in new policies or bylaws dealing with heritage resources protection. (Other recommendations herein address designating sites and areas as First Nation heritage and/or cultural sites).

Action C1. Consider a specific initiative in a public art procurement, design and building policy that would create an opportunity or provision of First Nations art in the Town.

Action C2. Consider specifically including/inviting First Nations artists to be eligible for a granting program.

Action C3. The Natural Areas Districts in Okotoks are essentially coincident with areas considered important to First Nations. Given that natural heritage is a highly valued component of the community, we recommend First Nations representatives be specifically included as community stakeholders in consultation and engagement.

Recommendation 19

The Municipal Heritage Designation Plan (Okotoks and J. M. Gartly Design Studio 2018) should be expanded and updated to include a First Nations component that lists important traditional areas and sites and include a section similar to the "Town History and Context" that discusses the area's First Nations history and related contextual information. We do not comment on the implications to the Land-Use

Bylaw by undertaking this recommendation. It is our view that the municipal planning policy framework should be reviewed, and a determination made with regard to the role, need for protection of traditional resources and land use sites and how those issues could be addressed within that framework. The existing vision and guiding principles of the plan and related policies are relevant to the area now occupied by the Town, but also to the area as it was before Euro-Canadian settlement.

Recommendation 20

The Town should consider a policy or a general objective of encouraging other municipal governments, industry and other levels of government to help preserve and protect traditional cultural resources and to recognize the traditional territories, culture history and assist in preservation of First Nations history, language and culture, particularly those First Nations whose territory includes what is now southern Alberta.

Recommendation 21

Establish a permanent committee composed of First Nations/Indigenous people and Town officials or citizens to provide advice and input to ensuring that Okotoks continues to address issues relating to First Nations history, culture and a sense of inclusiveness. This recommendation is made in consideration of the Town's vision statement and considers the long history of First Nations in this area and the consequences of colonialization. A standing committee to provide advice and guidance to the Town on matters relating to ensuring Okotoks is welcoming and inclusive to and continues to recognize First Nations' history and culture in the area would, in our view, contribute to the Town's vision and mission statements.



Figure 80. Tipis at sunset. Photo: Walter McClintock Papers, Yale Collection of Western American, Beinecke Rare Book and Manuscript Library, Object ID 2008195.

CONCLUDING REMARKS

The Town of Okotoks occupies an area that has outsized significance for southern Alberta First Nations. It is in the heartland of southern Alberta First Nations and, based on both historical accounts and the archaeological record, humans have been here throughout the Holocene Epoch, that is since time immemorial. The area's favourable confluence of geographical and biophysical features plays a large role in its long human history. Its topography and vegetation along with the moderating impact of winter chinooks means it presented favourable bison acquisition opportunities all year long, but particularly in fall and winter. The location of Okotoks at the transition between fescue grasslands and foothills Parkland means that the area was rich in plants that were important for many uses including dietary, medicinal, ceremonial, and personal use and tool production.

The area's environmental situation, although a significant factor in its importance to First Nations' culture and economy in the Pre-Contact Period, is not the only reason for its significance. The Old North Trail has a unique position in the culture history of the northern Plains. Both oral histories and archaeological evidence suggest the trail may be as much as 10,000 years old making it the oldest known trail in North America. Oral histories about the Trail dating to the 19th century, record stories of people of travelling for months or years eventually reaching what is now Mexico or even further south. Other histories also state the trail was used as a migration corridor in the Pre-Contact Period and there is both archaeological, linguistic and historical evidence to support that claim. The trail was almost undoubtedly used for trade at least between what is now Alberta and Montana. High quality stone from southwestern Montana is frequently found in archaeological sites in southwestern Alberta and that material may very well have moved north from its source area via the Old North Trail. It is likely that Old Macleod Trail followed the pre-existing Old North Trail between Fort Calgary and Fort Macleod and Okotoks may be in its current location ultimately because of the Old North Trail.

The area's role in culturally defining origin stories and religious beliefs is also very important. The Okotoks Big Rock is a geographical feature of rare importance and significance in Alberta and Canada. It is of comparable significance to Chief and Crowsnest Mountains in southwestern Alberta and a handful of other important sacred natural sites in western Canada.

The Sheep River valley in the Town has potential to contain as yet minimally disturbed or undisturbed sites including places of habitation, resource acquisition, and ceremonial/religious sites. In addition, there are many extant naturally occurring, traditionally important plants that occur in the Town. The Town can play an important role in the preservation and protection of the remaining natural habitat Town for its own sake, but also to preserve and protect traditional resources and recognize the long and rich culture and history of southern Alberta First Nations.

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