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# Chapter 3

# Feature Analysis



## Contents

- Geomorphology
- Climate
- Habitats
- Viewscapes
- History
- Management Issues
- Satellite Sites
- Summary of Recommendations



### Introduction

In this chapter, the historical and natural features identified in the Feature Inventory (Appendix A) are analyzed in terms of their importance for heritage appreciation services and products at Cypress Hills Interprovincial park. Key criteria used in the analysis are:

#### Significance

- a general assessment of the topic's potential importance in the overall Cypress Hills HA program

#### Visibility

- current or potential exposure to actual or virtual park visitors

#### Access

- proximity to concentrations of park visitors, and to other park features

#### Seasonality

- the periods when a feature is accessible to park visitors

#### Danger to Public

- a general assessment of public safety issues with respect to the park feature

#### Danger to the Resources

- a general assessment of potential risks to park landscapes, native flora and fauna and historical and cultural resources

The results of this analysis are to be used in conjunction with the audience analysis when developing HA themes. This will ensure that the themes will be appropriate for the people who visit the park and consistent with the key features of the park.

Readers should note that:

- new knowledge about the park's features and history is being gained yearly
- natural features of the park are changing over time
- management techniques and priorities adapt to meet these changes

To keep current, park HA staff should review and update the Feature Inventory and Feature Analysis regularly—approximately every five years.

## Geomorphology

## Physical Characteristics

### General Characteristics

#### Location in Feature Inventory (Appendix A)

The physical characteristics of the park are reviewed on page A.1.

The general shape of the plateau and location of steep slopes is covered on page A.9.

#### Significance: High

General characteristics including the location, size, elevation and relative age of the Cypress Hills are important background to the natural and cultural history. The physical characteristics of the park land and surrounding landscape give context to:

- the natural and cultural history of the area

- the physical characteristics made it possible for special plant communities to grow here which have attracted wildlife and people for millennia

- the park as part of a greater landscape
  - a concept that is central to the key management principle (Greater Park Ecosystem)
- the size of the park
  - It counters the concept that the park is only the Elkwater Townsite, a long-standing misconception of many long-time visitors.
  - this is also a foundation on which to build the concepts that this is a big park with many places even long-time visitors haven't visited and that there are many places to revisit when you come to the park

**Visibility: High**

**Access: Moderate**

Many of the gross geographic features are visible from where visitors concentrate. Individual features will be discussed in more detail.

3.1



## Geology

### The Importance of Geology to the Stories of the Cypress Hills

#### Location in Feature Inventory (Appendix A)

Information on geology is reviewed on pages A.2–7.

#### Significance: High

To effectively interpret the Cypress Hills, it is important for HA staff to understand the geological history of the region. The geology of the Cypress Hills is complex, and many of the geological features are hidden. However, the area's geology is the story of the formation and persistence of these hills in the otherwise flat landscape of southern Alberta and Saskatchewan. The geomorphology of the hills has and continues to interact with the climate, hydrology and ecology of this unique landscape.

#### Visibility: High to Low

The geological story of the Cypress Hills is often below the radar of many visitors. However, there are many geological features that can be observed from areas where visitor gather. Key features and locations will be discussed below.

#### Access: Variable

Many key geological features are easily accessed, while others are more remote.

#### Seasonality: Variable

Several key geological features are accessible year-round, while others can only be reached in summer.

## Sedimentary

## Formations/Bedrock

#### Location in Feature Inventory (Appendix A)

Information on sedimentary formations is reviewed on pages A.3–6.

#### Significance: High

The big picture of the layered geological strata that make up the Cypress Hills and the story of their formation is an important foundation story for this site that puts the present landscape in context. The fact that this landscape has changed dramatically over geologic time—from a sea bottom, to seashore, to dry land, to an island in a sea of ice, to an island of trees in a sea of dry grassland—emphasizes that landscapes change as climate changes. This sets a background for the more recent changes of the landscape and potential changes that may occur.

#### Visibility: Low

Except for conglomerate caprock most of the bedrock of the Cypress Hills is not visible.

#### Access: Low

Except for conglomerate caprock most of the bedrock of the Cypress Hills is not accessible.

#### Seasonality: N/A

#### Danger to Public: N/A

#### Danger to Resources: N/A

#### ➔ General Recommendations

See the recommendations for conglomerate and sandstone features on the following page.



# Heritage Appreciation Development Plan

## for *Cypress Hills Interprovincial Park-Alberta*

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### Conglomerate and Sandstone Features

#### Location in Feature Inventory (Appendix A)

Information on sedimentary formations is reviewed on pages A.4-6.

#### Significance: **High**

The Feature Inventory identifies places to see exposed conglomerate and sandstone. These are important opportunities for visitors to have first-hand exposure to geological formations that have shaped the landscape of the Cypress Hills.

#### Visibility: **Moderate**

There are many locations in the park where visitors can observe exposed conglomerate, and at least one location where sandstone can easily be encountered.

#### Access: **Variable**

Viewpoints identified in the Feature Inventory provide several good locations for visitors to encounter conglomerate.

One site near Ferguson Hill Campground provides easy access to see sandstone bedrock. Other minor sites include sites along Mitchell Creek Trail, Horseshoe Canyon Trail and the trailhead of Spruce Coulee Trail.

#### Seasonality: **Variable**

Many viewpoints are accessible only in summer.

#### Danger to Public: **Moderate-Low**

Viewpoints such as Horseshoe Canyon have eroding cliff-faces. These provide moderate safety concerns for visitors due to potential for slumping. Each site where visitors gather must be regularly assessed for signs of slumping, especially after snow melt and spring rains.

The sandstone near Ferguson Hill Campground is close to a bend in Ferguson Hill Road. No guard rails prevent pedestrians from straying onto the road. Currently, this site is not safe enough to encourage visitation.

#### Danger to Resources: **High-Medium**

There seems to be little risk to the resource at the conglomerate sites. However, already the soft sandstone at the Ferguson Hill Campground site is being defaced by graffiti.

SAMPLE DRAFTS



### ↳ General Recommendations

1. Easily viewed geological strata should be featured in HA offerings when:
  - they are easily accessible by visitors
  - they can be viewed and interacted with safely
  - there is little or no potential damage to features
2. A more complete inventory of surface geological features in the park and on public lands adjacent to the park be developed. This could include:
  - GIS (digital Geographic Information Systems) mapping of features
    - including the digitizing of existing resource management maps
  - work to be managed by park staff with input from:
    - volunteer stewards
    - partners from Alberta and Saskatchewan based universities and colleges

## The Eagle Butte Impact Crater

### Location in Feature Inventory (Appendix A)

Information on the Eagle Butte Impact Crater is reviewed on page A.7.

### Significance: **Moderate to Low**

The impact crater, located west of the park boundary, may have significance in its role as part of a meteor shower (perhaps parts of a breaking up asteroid's impact) that contributed to the mass extinction of many lifeforms, including dinosaurs, 65 million years ago known as the K-T (Cretaceous–Tertiary) extinction.

### Visibility: **Low**

The crater is very old and has been obscured by time making it difficult to see except in aerial photos and satellite images.

### Access: **Moderate**

The crater is located outside the western boundary of the park. Parts of the rim of this 18 km-diameter crater can be seen from roads in the area.

### Seasonality: **Year-round**

County roads are maintained all year.

### Danger to Public: **Low**

This ancient geological feature offers no danger to visitors.

### Danger to Resources: **Low**

This is a large geological feature that has endured for up to 65 million years. There is little a visitor could do to it.

### ↳ General Recommendations

1. This is a hard-to-see geological feature located outside the park. It may be incorporated as part of HA offerings on the topics of geological history of the park:
  - at the park centre
  - as part of an auto-tour of the park
  - part of remote HA offerings including brochures, web pages and videos

SAMPLE IMAGES



# Heritage Appreciation Development Plan

## for *Cypress Hills Interprovincial Park-Alberta*

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### Slumping

#### Location in Feature Inventory (Appendix A)

The Police Point Slump is reviewed on pages A.10–12.

#### Significance: **Moderate to High**

Slumping is an important mechanism in forming the past and current landscape of the Cypress Hills. It is an observable geological process with several easily viewed examples in the park.

Slumping is an key landscape features of the Cypress Hills. It occurs because of the rainfall and geological structure of the Cypress Hills. Slumping creates major landscape features and is a current example of landscape change.

Key points about slumping in the Cypress Hills include:

- in geological terms slumping is common in the Cypress Hills. It has occurred in the distant past, recent past, and will occur in the future.
- Police Point is the location of the most spectacular slump in recent times.
- the mechanism of slumping involves groundwater and the structure of geological layers that make up the Cypress Hills.
- many smaller slumps can be observed along the steep, north-facing slopes of the hills.
- Elkwater Lake appears to have been formed when a slump, significantly larger than the Police Point Slump, dammed a drainage system.

#### Visibility: **High/Moderate**

The Police Point Slump is highly visible from some viewpoints. Other smaller or older slumps may not be noticed by many visitors.

#### Access: **Moderate**

Horseshoe Canyon is the park's most accessible slump site with a parking lot and a viewing platform. There are several good distant views of the Police Point Slump from locations where moderate numbers of park visitors congregate. These include: Reesor Lake fishing wharf, the Reesor Lake Overlook, and the proposed Police Point viewing area. Police Point can be accessed from Police Point Road, though this road is a "resource road" not recommended for public travel.

3.8



### Seasonality: Variable

Horseshoe Canyon is accessible year-round. Police Point Road is a rough dry-weather road only. It is not open during the winter, during snow melt or after a rain. The distant view sites are open only in the summer.

### Danger to Public: Moderate

The Police Point Slump continues to move downhill. The cliff face at the site is high and steep and there are active erosion channels. Safety levels there are moderate.

### Danger to Resources: Low

#### ➔ General Recommendations

1. Slumping could be used to support the idea of landscape changing.
2. Public safety must be considered on a site-by-site, season-by-season basis if HA offerings take place near a slump site.
3. Location of current slump sites could be located and mapped (using GIS/GPS technologies) for education purposes. This can include project management by park staff with information gathering through:
  - reports from visitors as part of:
    - HA programs
    - independent reports
  - park staff
  - partners including:
    - volunteer stewardship groups
    - community groups e.g., nature clubs, scouts and guides
    - universities and colleges

## Hydrology

### Location in Feature Inventory (Appendix A)

Hydrology of the Cypress Hills is discussed on pages RI 12–14.

### Significance: Moderate

The Cypress Hills are part of the continental divide that separates the north-flowing waters of the Saskatchewan River drainage from the south-flowing Mississippi River system.

The hydrology of the Cypress Hills is at the core of why wetlands, surface water systems (lakes, rivers, creeks and ponds) are located where they are in the park. By understanding basic hydrology, visitors can understand why many of the features of the park are located where they are.

Water is an important factor in the dry climate of the Palliser Triangle. It is not readily available in many seasons except for places like the Cypress Hills and in big river valleys. The hydrology of the hills is responsible for the past, present and future distribution of plant and animal communities. The year-round availability of water is also responsible in a large part for the importance of the Cypress Hills to early human occupation.

Key points about the hydrology of the Cypress Hills include:

- the elevation, soils and plateau bedrock porosity combine to make the highlands an important groundwater recharge area for the region.
- the riparian zones around creeks and lakes are extremely biologically rich
- aquifers near the base of the plateau (plus surface run-off) supply water for a series of permanent and seasonal springs, creeks, rivers, ponds and wetlands.
- the presence of lakes and forest vegetation supported by the park's hydrology are key reasons why the Cypress Hills are an important regional recreation area.



# Heritage Appreciation Development Plan

## for *Cypress Hills Interprovincial Park-Alberta*

### Habitats

#### Location in Feature Inventory (Appendix A)

Information about terrestrial habitats of the Cypress Hills can be found on pages A.19–30.

Detailed discussions of habitat types can be found as follows:

- Lodgepole Pine Association pp. RI 18–19
- White Spruce Association pp. RI 20–21
- Aspen Forest pp. RI 21–22
- Wetlands p. RI 23
- Fescue Prairie Association pp. RI 25–26
- Mixed Grass Prairie p. RI 26
- Wildlife
  - Wildlife information can be found within each habitat section

#### Significance: **High**

A diversity of habitats are a key part of the Cypress Hills experience.

The Cypress Hills is a unique combination of fragmented and dispersed patches of forest and fescue grasslands. Each of these patches exists as a result of local hydrology and local climate conditions and has a history that makes it unique. Visitors can learn to read the landscape and deduce its history, and perhaps even predict its future.

Key points about habitats include:

- the park is made up of forest and grassland.
  - boundaries of forests and grasslands change over time in response to ecological pressures such as drought, fire, competition between native species and competition from invasive weeds.
  - the most important grassland component is rough fescue habitat.
- the Cypress Hills contain islands of less common habitats surrounded by a sea of dry mixed-grass prairie on the plains below including:
  - rough fescue prairie association, an island of productive, moisture loving grassland.
  - forest islands—the Cypress Hills are one of a series of small forest islands in a sea of grassland that makes up the great plains of North America.
  - three types of forest can be found here:
    - highland, riparian, scarp

3.12



# Feature Analysis

## Chapter 3

- key plant associations include:
  - lodgepole pine forest
  - white spruce forest
  - aspen forest
  - wetland
  - fescue prairie
  - mixed grass prairie
- fescue prairie and lodgepole pine forests are isolated habitats lying outside of the regular range for these plant communities.
- each habitat supports a wide variety of wildlife
  - some are specialized to only one habitat
  - some require two or more of these habitats to complete their life cycles.
- the habitats and communities in the Cypress Hills are ever-changing in their size, age and health.
  - these changes have occurred in times past, are occurring now, and will occur in the future, especially as a result of climate change
  - examples of current trends include the decline of aspen forests and the expansion of lodgepole pine into the fescue grasslands.

### Visibility: High/Medium/Low

High visibility habitats include all forest types, and lakes. Both trees and permanent water bodies are rare in the Palliser Triangle.

Moderate visibility habitats include two types of grassland. These are classified as moderate not because they are relatively rare, but because grasslands are overlooked by many visitors, especially those from cities. We have also classified the wetlands surrounding Elkwater Lake as moderately visible. Even though they are fairly extensive, many visitors overlook them.

Most of the wetlands are low visibility because of their relative rareness and also because many people overlook small wetlands.

### Access: Varies

There are representatives of all major habitats that are close to areas where park visitor congregate. There are also many patches of diverse habitat that are remote and seldom visited.

### Seasonality: Varies

### Danger to Public: Varies

There are a variety of risks to park visitors including drowning in lakes, to potential exposure to human- and naturally-caused forest and prairie fires. Cougars are reported in the park and may at some time pose a danger to individual visitors or their pets.

Each individual location for HA programming should be assessed with respect to potential risks to visitors.

### Danger to Resources: Varies

Most habitats in the park are at risk to human generated fire during the summer and especially during drought.

Streams and wetlands can be easily damaged by regular, long-term or short heavy use by park visitors.

Also, there are environmentally sensitive sites where such things as rare orchids or endangered wildlife live.

Each site designated for HA-related activities should be considered for possible impacts.

### General Recommendations

1. Visitors should be encouraged to get out into the park to discover and experience the wide variety of habitats.
2. Maps and three-dimensional diagrams, maps and models of the habitats of the Cypress Hills should be developed for education and orientation purposes.
  - these materials are not currently readily available to HA staff although there is currently regional support for GIS mapping in Lethbridge.
  - the extent and condition of the following habitats should be regularly monitored:
    - Fescue Prairie Association
    - Lodgepole Pine Association
    - White Spruce Association
    - Aspen Forest
    - Wetlands.
3. Information about the current locations and extent of key habitats can be gathered and mapped using GIS/GPS technologies for land management and education purposes. This would require project management by park staff with information gathering through:
  - reports from visitors as part of:
    - HA programs
    - independent reports
  - park staff
  - partners including:
    - volunteer stewardship groups
    - community groups e.g., nature clubs, scouts and guides
    - universities and colleges



**Access:** Moderate

**Seasonality:** Summer/Fall

The highest fire dangers usually occur in the dry season.

**Danger to Public:** Varies

The level of fire-danger to visitors depends on the level of dryness.

**Danger to Resources:** Varies

### ➔ General Recommendations

Fire is an important environmental education topic, management issue and safety concern. HA staff should:

1. Provide offerings that inform visitors and stakeholders about the importance and history of fire in the natural systems of the park
2. Assist managers and enforcement staff in ensuring the fire safety of the park and park visitors and preparing visitors for management activities before and during the times they take place.
3. Assist managers who are developing a better understanding of the park's fire issues. Assistance may include:
  - interpreting these initiatives to visitors and the greater public
  - as part of the HA program, but under the supervision of resource managers, work with volunteers and qualified community groups in support projects such as:
    - scouting and mapping habitats that may be vulnerable to fire or have high fuel loads
    - monitoring the effects of activities such as prescribed burning

## History of Biological Landscapes

### Location in Feature Inventory (Appendix A)

A short review of the history of biological landscapes in the Cypress Hills can be found on page A.34.

**Significance:** High

The fact that the Cypress Hills avoided glaciation is an important feature of this landscape. It makes the park a rare and important source of information about what the area was like before the last ice age. There are many details about ancient plants and animals hidden in the soils and sediments of lakes in the park. This story is important to show how the park is an important historic record of changing natural environments.

Key points include:

- most of the higher elevations of the Cypress Hills escaped glaciation
  - there was no scraping away of ancient soils and waterways by the continental ice mass that swept across most of Canada and the northern US.
- as a result the soils, wetlands and lakes are a gold mine of information about ancient environments unavailable elsewhere.
  - vegetation conditions and changes have been recorded in a continuous 9,120-year pollen record (extends to the early Holocene).
  - this is one of the few continuous pollen records from the northern Great Plains.

**Visibility:** Low

Many indicators of the age of the Cypress Hills landscape are subtle, and much of the evidence is minute and hidden e.g., the pollen record. Visitors will likely need to be guided through discovery activities and learning materials. Remote or animated presentations may also help reveal the ancient landscapes.

**Access:** Varies

Elkwater Lake is the park's only permanent natural water body. It is the site of highest visitor activity.

There are several wetlands located throughout the park that also provide long-term pollen records.

3.15



# Heritage Appreciation Development Plan

## for Cypress Hills Interprovincial Park-Alberta

Table 3.1:  
Assessment of Current and Potential Viewpoints

	Significance	Visibility	Access	Seasonality	Danger to Public	Danger to Resource
1. Head of the Mountain	High	High	High	Year-round	Low	Low
2. Horseshoe Canyon Viewpoint	High	High	High	Year-round	Moderate	Low
3. Reesor Lake Lookout	High	High	High	Year-round	Low	Low
4 Police Point Slump	Medium	Medium	Medium	Summer only	Low	Low
5. The Prairie from Elkwater Lake	Medium	High	High	Year-round	Low	Low
6. Reesor Lake	Medium	High	High	Summer only	Low	Low
7. Plateau Prairie	Medium	Medium	Low	Summer only	Low	Low
8. Northern Escarpment Face	High	High	Medium	Year-round	Low	Low

Seasonality: Summer

Danger to Public: Low

Danger to Resources: Unknown

Information about ancient biological landscapes are extremely rare in Canada. Care must be taken not to damage important sites which may hold important information (e.g., pollen records). It would be advisable to consult with experts on paleobotany and paleoenvironments if HA activities are planned to demonstrate or investigate ancient environments to determine proper locations and techniques to be used. It is likely that much of this important learning will be facilitated using exhibits and remote media.

### General Recommendations

HA staff should:

1. Communicate the importance of the Cypress Hills as a paleological resource.
2. Interpret the findings of paleoecologists to visitors and the greater public.
3. Encourage further research by universities and colleges.



# Heritage Appreciation Development Plan

## for Cypress Hills Interprovincial Park-Alberta

### History

#### Location in Feature Inventory (Appendix A)

History of the Cypress Hills is discussed on pages A.41–54.

History is an important topic for HA services and products, including formal education audiences (history and geography). The park is rich in human history. It appears that the Cypress Hills' unique, milder environment and abundant wildlife and plants has attracted people since there were humans on the prairies.

#### Ancient History

#### Location in Feature Inventory (Appendix A)

Ancient history of the Cypress Hills are discussed on pages A.41–45.

#### Significance:

The ancient history of the Cypress Hills is one of the key features of CHIP-AB. The resources found at the Stampede Archaeological Site are thrilling and, if funding continues, the site is likely to provide an increasingly broad, clear picture of how ancient people lived in the Cypress Hills. The partnership with researchers like Dr. Gerald Oetelaar have proved friendly and productive.

Findings of the current research team indicate that the Cypress Hills has long been a moist oasis in the drier plains, but also that radical climate shifts have occurred and that the flora and fauna changed as a result. In the past people and wildlife adapted to these changes.

Key points about early human occupation include:

- human history in the Cypress Hills area dates back more than 7,000 years—in fact, at the time of writing, it appears that there is evidence of human occupation at the Stampede archaeological site as far back as 8,500 to 9,000 years.
- archeological digs on the north slope of Cypress Hills have found stone and bone tools and butchered and charred bones.
- the area included artifacts of the Besant, Pelican Lake, Oxbow and Bitterroot cultures.  
- one of Canada's best locations for

SAMPLE PAGES

3.18



# Feature Analysis

## Chapter 3

information about these cultures could well be the Stampede Site in CHIP-AB

- the site contains an extended sequence of evidence of human occupation—a rare and valuable opportunity to investigate long-term human responses to ongoing change in the social and environmental conditions of the Canadian plains

The archaeological studies of the Cypress Hills are yielding valuable and fascinating information about the early people of the plains, how they lived and the kinds of environments and habitats they lived in. This work provides the park and its visitors with:

- up-to-date, even cutting-edge information
- access to experts in a variety of fields of archaeological research
- opportunities to view an active archaeological site and perhaps to view genuine artifacts

### **Visibility: Low**

Signs of ancient human activity are generally out of sight to most visitors, often buried under metres of soil.

### **Access: Moderate/Low**

The Stampede Archaeological Site is located near Elkwater townsite making it moderately close to the largest concentration of park visitors.

Researchers indicate that there are numerous sites of archaeological interest in the park. Many are located in more remote areas. However, a site near Firerock Campground has abundant archaeological material near the soil surface.

### **Seasonality: Summer only**

Archaeological excavations can only take place in warmer drier seasons.

It must be noted that it is unlikely that there will be archaeological digs operating every year.

### **Danger to Public: Moderate**

There is possibly some danger of visitors falling into archeological excavations at sites at the Stampede site. This site would require high maintenance and supervision because of the great depth of the excavations.

### **Danger to Resources: Moderate**

Great care should be taken to protect archaeological sites from vandalism and over-enthusiastic people who may wish to excavate and take artifacts. This activity may greatly reduce the amount of reliable scientific information that can be gained at a site.

### **General Recommendations**

1. Encourage, support and sponsor public presentations by researchers to public audiences inside and outside the park.
2. Continue to develop ways to present the findings of the archeological research in the park.
3. To avoid interfering with research, continue to present most HA offerings concerning the archaeology of the park at locations away from the Stampede site.
4. Continue to work with archaeological researchers to develop a clear understanding of the research that is on-going and proposed.
5. Work with the current archaeological researchers to identify ways that the park can assist in ensuring on-going research in the park.



### ↳ General Recommendations

1. Recent-history-related HA offerings should target primarily local park visitors with an aim to inform but also learn new facts, impressions and interpretations (two-way communication).
2. HA offerings should be co-ordinated with those provided by key partners:
  - Fort Walsh National Historic Site of Canada, which specializes in the interpretation of the time period leading up to the establishment of the North West Mounted Police (circa 1878) through to the end of RCMP facilities in the Cypress Hills (1968).
  - CHIP-SK which specializes in the local history of the Saskatchewan sections of CHIP and also has a strong focus on First Nations history and culture.
  - HA staff should monitor developments of local Metis association initiatives to develop historic interpretation in the park area
3. HA offerings at CHIP-AB should:
  - not overlap the areas of specialty of its two partners
  - complement and acknowledge partners' programsTo do this HA staff will need to:
  - continue to communicate regularly with staff at FWNHS and CHIP-AB (Saskatchewan) to keep up-to-date on activities and initiatives
  - promote programs and special events held by these partners
  - provide partners and potential partners with information about upcoming programs and events at CHIP-AB

## Historical Assets

### Location in Feature Inventory (Appendix A)

Three major historical assets were identified:

- Tom Trott Memorial Forestry Museum pp. A.50–51
- Bull Trail Interpretive Node p. A.52
- Graburn Cairn pp. A.53–54

St. Margaret's Anglican Church (p. A.51) is a minor feature.

### *Tom Trott Memorial Forestry Museum*

**Significance:** Moderate

Forestry has been an important part of the Cypress Hills and even though there is no commercial extraction of timber taking place in the park. The management practices of the past have resulted in the current state of forests. Forest management in the park is important and on-going.

Tom Trott is important especially to those who knew him. It is important to try to maintain his legacy of public education about forestry in the Cypress Hills.

The museum building and the Graburn Patrol Cabin display numerous historical artifacts including tools, equipment, maps and photos. Unfortunately, budget constraints have made display and curation of the collection difficult—many photos and maps are displayed in simple mounts that provide little long-term protection at lighting levels that make them difficult for visitors to view. Also, limited funding has made it difficult to maintain some of the permanent outdoor exhibits in the nodes of the site's interpretive trail. While a good start has been made, substantial funding will be needed to complete this site as a museum. Redesign as a self-guided outdoor exhibit or relocation may be required.

Currently, limited HA staffing make it difficult to keep the museum open year-round. In the future, when the Park Centre is completed, it will likely be increasingly difficult to staff this site. This could further limit public exposure to the materials in the museum.

**Visibility:** Moderate

**Access:** Moderate

3.21



# Heritage Appreciation Development Plan

## for *Cypress Hills Interprovincial Park-Alberta*

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**Seasonality:** Occasional

**Danger to Public:** Low

**Danger to Resources:** High

Many important artifacts, maps and documents are stored in an unheated building. They risk damage from moisture, cold and small wildlife.

### ↳ **General Recommendations**

1. Unless significant funding for HA staffing at the Tom Trott Museum, and funds for a major upgrade of the site are made available, the site should be redesigned as a low maintenance, self-guided, outdoor interpretive exhibit.
2. Budget must be set aside for regular maintenance of the existing outdoor exhibits and the site's perimeter fencing in order to maintain good practice and high standards.
3. The most important maps, photos and artifacts stored and displayed in the museum and other buildings should be considered for use in permanent and temporary exhibits in the new Park Centre.
4. To ensure better protection of valuable heritage resources, all perishable materials (maps, books, photographs) should be stored in the new Park Centre.

**SAMPLE PAGES**

3.22



# Heritage Appreciation Development Plan

## for *Cypress Hills Interprovincial Park-Alberta*

### Management Issues

HA staff can assist park planners, managers, enforcement and operations staff in keeping park visitors informed of park management and operational initiatives and regulations. As well, HA staff can assist some management and research initiatives through attracting and coordinating volunteer groups and individuals.

As stated in the Feature Inventory, HA staff will work with other park staff and contractors to develop within park users and the greater public an awareness and understanding of the values of having and maintaining a large natural park. HA staff will also work to engender support and participation in preservation, conservation, and education initiatives of the park and Alberta Parks and Protected Areas (for more details on the benefits of HA services see Table 3.2).

This can be done through:

- a variety of programs, projects and more delivered by HA staff
- education campaigns for specific management issues prepared and delivered by management and HA staff working together
- assisting members of the other arms of PPA in developing skills and capacity to use communication and education approaches to deliver messages to specific stakeholder groups
- work with friends groups and volunteer stewards to:
  - develop the capacity of these groups to support stewardship initiatives in the park and in the greater park ecosystem
  - develop and maintain a positive relationship between these groups, the park and PPA

In many situations HA staff have communication skills and experience that can assist in working with local and remote stakeholders and achieving positive results. These skills may be supplied in all aspects of park management.

Management issues may be difficult to rationalize as “features” let alone to analyze them as such. But management is part of the park reality to be addressed by HA services (see How HA can contribute to the PPA’s stewardship principles in Chapter 1, p. 1.5).

3.24



# Heritage Appreciation Development Plan

## for *Cypress Hills Interprovincial Park-Alberta*

### Sidebar: What is Multistakeholder Dialogue?

Stakeholders are individuals, communities or organisations that affect or are affected by the operations of the park.

These include park visitors, leasees, park-based associations, individual friends and critics of the park, special interest groups such as Elkwater cottagers, non-governmental organizations such as the Canadian Parks and Wilderness Society, the private sector such as local businesses and ranchers, and representatives of the park and other government agencies. The dialogue occurs when these groups meet to exchange opinions and positions on a certain topic which affects or is of interest to all participants.

### Why a Multistakeholder Dialogue?

Meetings among these groups assist in building understanding of issues, appreciation and valuing of the needs and points of view of other stakeholders, and the maturation of consensus for joint action.

Multistakeholder dialogue assists in addressing:

- controversial practices, ensuring that stakeholders:
  - understand why certain management practices are occurring
  - make suggestions on how negative impacts can be minimized
  - assist in publicizing and carrying out these practices
- transparency, ensuring that information on why how and when is available, and building trust and a fair decision-making process
- engagement, encouraging and enabling stakeholders to:
  - understand the issues from many points of view
  - discuss and analyze options
  - take part in management activities when appropriate
  - develop leadership skills that assist stakeholders in engaging more of their constituents

### Key Areas for Consideration

- environmental issues
- social and ethical implications
  - what are the effects on people that use the park, park neighbours and the greater community
- political and economical pressures and constraints
  - what are the political and economic realities that must be considered when making management decisions
- the management matrix
  - how the management of one component of the park impacts other management concerns

## Management of Human Heritage Resources

### Location in Feature Inventory (Appendix A)

Management of human heritage resources is discussed on page A.71.

### Significance: **High/Moderate**

People have been part of the Cypress Hills landscape for a very long time, and we are still part of the landscape's story.

Understanding the history of human activity in the Cypress Hills has the potential for helping PPA staff as managers of the park to work with other stakeholders to make wise land management decisions now and in the future.

The Cypress Hills are an important repository of early human history of the prairies.

### General Recommendations

HA staff should:

1. Through various media and, when possible, through hands-on first hand interaction:

#### Archeology

- develop and/or nurture partnerships with provincial and federal agencies and NGOs that work to protect and understand our ancient history
- keep the public aware of current information and new archaeological discoveries in and around the park
- provide context and indicate the significance of these discoveries
- when it is appropriate, encourage participation in archaeological projects in and around the park

#### Recent History

- develop and/or nurture partnerships with provincial and federal agencies that work to protect and understand our recent history
- keep the public aware of current understanding of the recent history of the park and surrounding area
- provide context and indicate the significance of our recent history
- encourage participation furthering our understanding of recent history of the park and

3.26



area, especially encourage, enable and record input from local visitors who have knowledge of local historical events

2. Ensure that visitors are aware of regulations that protect local historical resources and govern how people can interact with park resources.
3. Where appropriate, encourage and enable participation in sanctioned studies of ancient and recent history.
  - projects and other public involvement activities are key methods for building stewardship as required by the PPA Stewardship Model (see Chapter 1, p. 1.9 and Chapter 4, p. 4.2) for key methods

## Satellite Sites

Cypress Hills Provincial Park has three designated satellite sites:

- Red Rock Coulee Natural Area
- Milk River Natural Area
- Kennedy Coulee Ecological Reserve

### Location in Feature Inventory (Appendix A)

Information on the geology, natural history and human history of the sites are located as follows:

- Red Rock Coulee Natural Area was discussed on pages A.73–76.
- Milk River Natural Area and Kennedy Coulee Ecological Reserve are adjacent properties and were considered together on pages A.77–94.

### Significance:

**High**

All three properties are located in one of Canada's largest remaining native mixed grass prairies. They afford the opportunity for visitors to experience an endangered landscape that was an important part of the history of Alberta and Canada.

All three sites have representative native habitats, plants and wildlife of the dry mixed prairie ecosystem.

### Red Rock Coulee Natural Area

Redrock Coulee is also a location with an abundance of sandstone concretions, a rare sight and easily accessible.

### Milk River Natural Area and Kennedy Coulee Ecological Reserve

These properties are larger. Current information indicates the presence of several rare and endangered species listed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

### Visibility:

Red Rock Coulee Natural Area	Moderate
Milk River Natural Area	Low
Kennedy Coulee Ecological Reserve	Low

### Access:

**Red Rock Coulee Natural Area** **High**

Red Rock Coulee is easily accessible by passenger car for much of the year and is within an hour's drive of Cypress Hills Provincial Park. Information on rare or protected plant and wildlife species is limited.

3.27



### Summary of Recommendations

#### Dark Sky

1. CHIP-AB be designated as a Dark Sky Reserve
  - the park adopt the guidelines developed by the RASC to maintain the dark sky
  - CHIP-AB as a Dark Sky Reserve be promoted to park visitors, especially campers and cottage owners
2. When suitable CHIP-AB should partner with provincial, local and national astronomy groups to provide HA offerings including special events on astronomy and night sky watching.

#### Geomorphology

##### General Characteristics

1. The physical characteristics of the park should be incorporated into HA services where appropriate.

#### Geology

##### Sedimentary Formations/Bedrock

##### Conglomerate and Sandstone Features

1. Easily viewed geological strata should be featured in HA offerings when:
  - they are easily accessible by visitors
  - they can be viewed and interacted with safely
  - there is little or no potential damage to features
2. A more complete inventory of surface geological features in the park and on public lands adjacent to the park be developed. This could include:
  - GIS (digital Geographic Information Systems) mapping of features
    - including the digitizing of existing resource management maps
  - work to be managed by park staff with input from:
    - volunteer stewards
    - partners from Alberta and Saskatchewan based universities and colleges

#### The Eagle Butte Impact Crater

1. This is a hard-to-see geological feature located outside the park. It may be incorporated as part of HA offerings on the topics of geological history of the park:
  - at the park centre
  - as part of an auto-tour of the park
  - part of remote HA offerings including brochures, web pages and videos

#### Glaciation and Its Effects

1. The story of glaciation should be featured, especially the importance of the nunatak to the physical and biological features of the park and surrounding landscape. The effects of glaciation on surrounding prairie is a common theme at other sites, and should be used only to support learning around the Cypress Hills nunatak. In addition glaciation and its effects:
  - are easily accessible by visitors
  - can be viewed and interacted with safely
  - there is little or no potential damage to rare natural and cultural features
2. A more complete inventory of surface geological features in the park and on public lands adjacent to the park be developed. This could include:
  - GIS (digital Geographic Information Systems) mapping of features
  - work to be managed by park staff with input from:
    - volunteer stewards
    - partners from Alberta and Saskatchewan-based universities and colleges

#### Slumping

1. Slumping could be used to support the idea of landscape changing.
2. Public safety must be considered on a site-by-site, season-by-season basis if HA offerings take place near a slump site.
3. Location of current slump sites could be located and mapped (using GIS/GPS technologies) for education purposes. This can include project management by park staff with information

