

Preserving the Land

In a dark cave in the Rocky Mountains, warm water from deep inside the earth bubbled up in hot springs. For centuries, people of the Kootenay First Nation had known the cave as a sacred place of peace. In 1883, three men helping to build the new railway discovered the cave. They made a plan for it. They wanted to start a spa—a place where people could come to enjoy a dip in the warm water. The spa would make them rich.

Instead, two years later, the Canadian government made the area into Banff National Park. Most of the land would be preserved exactly as it was. Banff was the first national park in Canada and only the third in the world. The area was set aside so all the people of Canada could enjoy it forever.

Alberta's Story

You have read that people in Alberta use the land for agriculture, mining, and forestry. People also use the land and water for activities such as skiing, fishing, hiking, and camping. In this chapter, you will discover how Alberta tries to protect some of its land. You will find out how parks and protected areas help to preserve Alberta's heritage, land, plants, and animals.



Inquiring Minds

Here are some questions to guide your inquiry for this chapter:

- Why are provincial parks, protected areas, and national parks important?
- How do we protect Alberta's land and heritage?

Look for answers in this chapter. If you have other questions, explore more!



How can I share some of the things I find out? I will

- think about my audience. Who am I sharing this with?
- try using graphic organizers like Venn diagrams or webs
- try writing a report, giving a speech, or creating a slide show

Why Do We Need to Protect the Land?

words matter!

Habitat is the place where an animal makes its home in nature. If the habitat is changed or cleared, animals might leave to find a home somewhere else, or they might die out.

Some of Alberta's endangered plants and animals:

1. western spiderwort
2. western blue flag
3. northern long-eared bat
4. whooping crane

Do you remember reading about the prairie grasslands in Chapter 1? Two hundred years ago, many different types of animals and native plants were found on the grasslands. Now the land is filled with farms and cities. Most of the original animals and plants are gone. The native grasses have been dug up, and the animal **habitats** have been cleared.

Now think about how natural resources are used in Alberta. Huge areas of the boreal forest are cleared to mine the oil sands. Forests are cut for lumber. How could using the land in this way affect the natural environment?

Look at the plants and animals below. They were once common in Alberta. Now there are so few of them left, they might die out. How can we protect them, and other plants and animals that are in danger?



How Can We Preserve Land for the Future?

To protect plants and animals, governments have set aside some parts of the province they call **protected areas**. Some protected areas also preserve landforms, such as hoodoos in the badlands.

Different Types of Protected Areas

Some protected areas allow visitors. National and provincial parks are protected areas where people can go to enjoy the landscape, plants, and wildlife. Other protected areas are closed to people. In all protected areas, there are strict limits on how the land is used. Hunting, fishing, logging, drilling, and mining are banned in some areas. Even though people can use some of the resources, large areas will be protected for the future. Protected areas help to sustain the natural environment of Alberta.

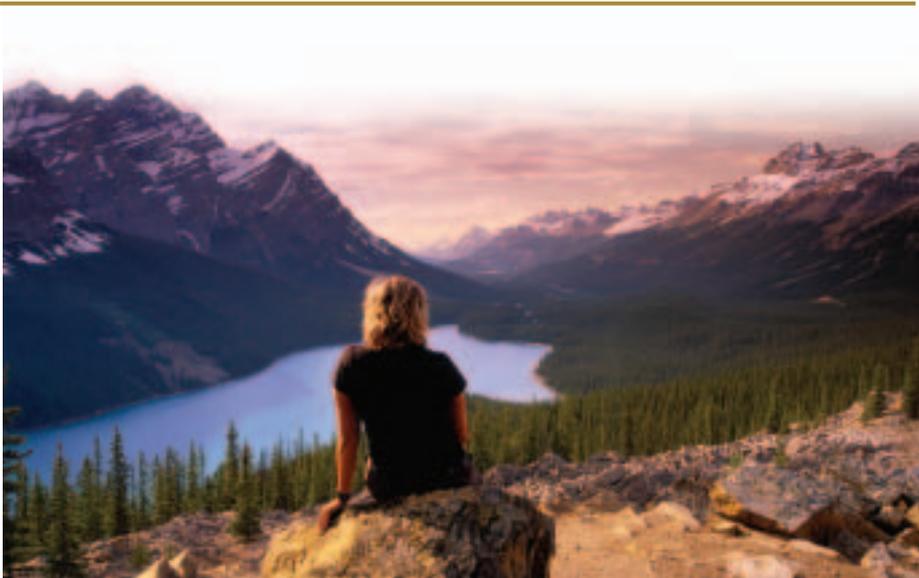
ALBERTA VOICES

A Gift to My Grandchildren

I think about a time when I sat on a wildflower-covered ridge and watched 31 mountain goats, large and small, in Willmore Wilderness Park.

I hoped that my grandchildren would one day sit in the same meadow to watch the goats' grandchildren.

Ray Rasmussen



words matter!

Protected areas are areas of land set aside to protect special features such as plants, animals, and landforms.

Thinking It Through

Think about the last time you visited a park.

- What did you do there?
- How would your quality of life be different if there were no parks? Explain.

Enjoying nature in Willmore Wilderness Park

words matter!

National parks are managed by the government of Canada to preserve natural beauty or places of historical importance.

Provincial parks are managed by provincial governments to preserve places of natural or historical importance.

Alberta's Parks and Protected Areas

Provincial Parks
Ecological Reserves
Wilderness Areas
Natural Areas
Provincial Recreation Areas
Heritage Rangelands
Willmore Wilderness Park
Wildland Provincial Parks

Who Created Parks and Protected Areas?

Look back to the story of Banff on page 236. Who was responsible for creating Banff National Park?

The government of Canada protects some parts of the country for all citizens to enjoy. Since Banff was created, many more **national parks** have been established. There are now more than 40 of them across every province and territory in Canada. They preserve natural features that are important to all of Canada.

Alberta has five national parks. Do you think this is enough to protect all of the province's unique features and places? In 1932, the government of Alberta decided that the province should also take steps to protect the land. Today, the government of Alberta takes care of more than 500 **provincial parks** and different types of protected areas. In all, the government of Alberta works to protect over two million hectares!

Sign welcoming visitors to Jasper National Park. Canada's two official languages are used in national parks.

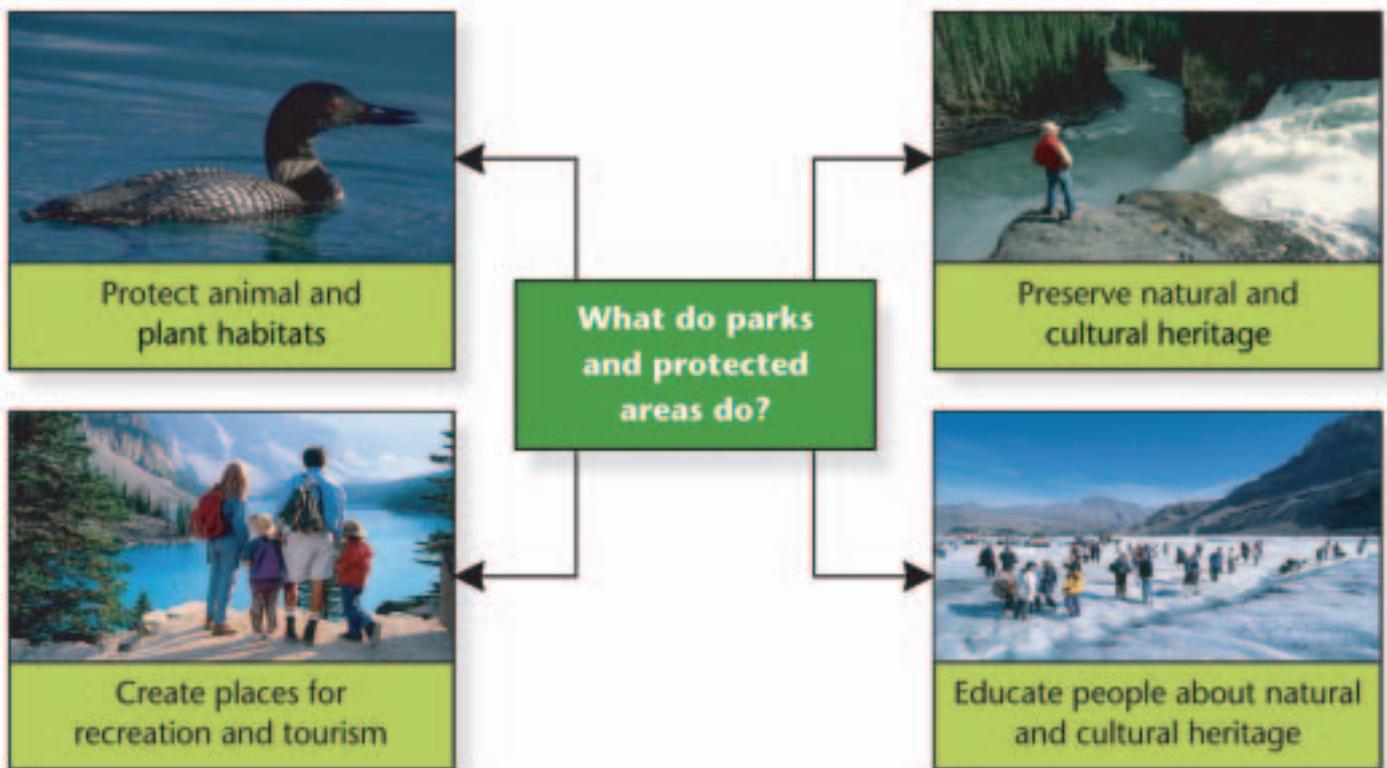


What Do Parks and Protected Areas Do?

The diagram below shows some of the purposes of parks and protected areas. Many parks and protected areas have interpretive centres with displays that tell about special features of the area. Sometimes they tell about the land or about people who have used the area in different ways. In many places, visitors can participate in hikes and other programs with park wardens to learn more about the area. Most parks have campgrounds where people can enjoy being outdoors.



Jasper was named after Jasper Hawes, a North West Company clerk. Mount Edith Cavell was named after a British nurse. I'll make a web to share what I know about Jasper.



ALBERTA VOICES

Respect for the Natural World

If we hope to preserve our way of life, the first thing we must do is rediscover our respect for the land, the water, and the entire natural world.

Lois Hole, former lieutenant governor of Alberta

Viewpoints

Should Logging Be Allowed in Protected Areas?

All protected areas have rules about land, water, plants, and animals. However, different types of protected areas have different rules. For example, logging is allowed in **heritage rangelands**. These areas were created to protect prairie grasslands. Logging is also allowed in **wildland provincial parks**. They were created to allow people to enjoy camping and hiking. Logging is not allowed in **wilderness areas**.

People have different views about logging in protected areas. Let's see what they have to say.

▼ Athabasca Dunes Ecological Reserve

Logging Without Limits!

I think logging should be allowed in all protected areas. More than half of Alberta is forest. We won't be running out of trees anytime soon.

Cutting down trees in protected areas won't affect the environment in the long run. Trees grow back, don't they?

Rock Lake–Solomon Creek Wildland Park ▶

Is logging allowed in these protected areas?



No Logging!

Logging should be banned in all protected areas. Protected areas were created to protect the environment. We should leave them in their natural state.

Logging could conflict with other activities. I'm a birdwatcher, and logging destroys the birds' habitat.

Logging with Care!

Some protected areas, like wilderness areas, were created especially to protect the forest. We shouldn't log in those areas. But some protected areas were created to preserve other things. So I agree with logging in those places.

We have to be careful about logging in protected areas. There should be a limit to the number of trees cut. We should log only the younger trees and preserve the old ones.



Logging is an important industry for Alberta. What are the advantages and disadvantages of allowing logging in protected areas?

Over to YOU!

1. Work in a group to discuss these viewpoints. What is your opinion? Would your opinion be different if you worked for a logging company?
2. Do you think other activities, like mountain biking or riding snowmobiles, should be allowed in protected areas? Explain your thoughts.
3. With your group, make a list of rules you think people should follow in a natural area near your community. Think about ways you can preserve the land for future generations.

What Do Our National Parks Preserve?



I could create a slide show about Alberta's national parks. I will share my presentation with a younger student.

Skill Smart

What do the pictures on the opposite page show about Alberta's natural landscapes? Write a descriptive paragraph about Alberta's national parks. Include information about some of the things the parks protect.

World Heritage Sites

Three of Alberta's national parks are also World Heritage Sites. They are Wood Buffalo, Jasper, and Banff. World Heritage Sites are places of great natural or historic value to the world as a whole.

Let's learn more about Alberta's five national parks. As you read, think about what each park preserves. Look at the photographs to find out more about each park.



ALBERTA'S NATIONAL PARKS



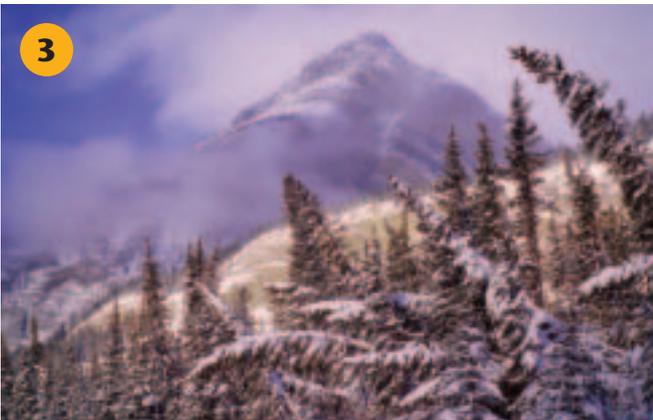
1

Wood Buffalo National Park is the world's second-largest park. It also has the largest herd of free-roaming buffalo.



2

Jasper National Park is the largest park in the Rocky Mountains. The Athabasca Glacier is in Jasper National Park.



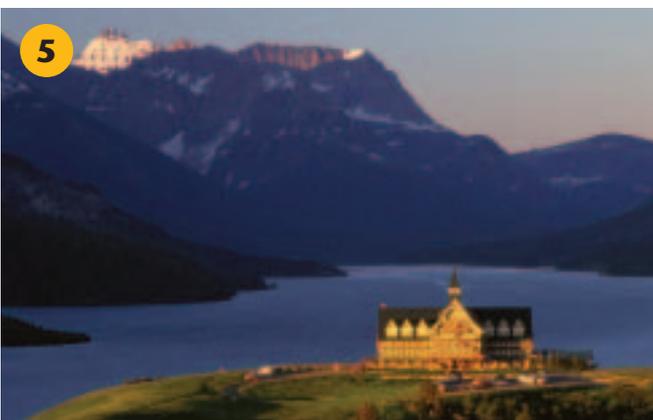
3

Banff National Park has mountains, sparkling lakes, hot springs, and forests. It is one of Canada's most popular parks.



4

Elk Island National Park features the Living Waters Boardwalk, a 150-metre floating sidewalk on Astotin Lake.



5

Waterton Lakes National Park is in Canada. Glacier National Park is in the United States. Together they form Waterton-Glacier International Peace Park. Canadians, Americans, and Blackfoot First Nations work together to protect the land and wildlife here.



Wood Buffalo National Park

Wood Buffalo National Park was created to protect the buffalo in northern Canada. If you visit, though, you might see more birds than buffalo. The big animals are often in hiding.

Why are there so many birds? The park has huge **wetland** areas that have formed where the Peace and Athabasca rivers come together. Birds use the wetlands as a nesting place. One of the wetland areas is a nesting place for the endangered whooping crane. It is the only nesting habitat in the world for this bird.

words matter!

Wetlands are areas covered by water. They include ponds, sloughs, and marshy areas that provide habitat for wildlife. Wetlands act like sponges. They filter and clean water. They also absorb some water, preventing floods.



◀ Ducks flying over Lynx Strand Creek. The wetlands in the park provide habitats for birds on their long journey to warmer weather.

Thinking It Through

Why do you think it is important to protect the buffalo in Alberta? (Hint: Remember the role of the buffalo in Alberta’s history.)



▶ Salt flats in Wood Buffalo National Park. These huge areas of salt plains are unique in Canada.

ALBERTA VOICES Who Was More Afraid?

My husband, David, and I were hiking in Wood Buffalo National Park one summer. As I came around the bend, I was surprised by a moose heading right towards me. I jumped, turned, and walked in the other direction. The moose did the same thing. It turned around and ran away! I guess he was as afraid of me as I was of him.

Kim Webber

Jasper National Park

Jasper is the most northern of Alberta's mountain parks. More than two million people visit the park each year.



▲ Rafting on the Maligne River, Jasper National Park



▲ Pyramid Lake and Mountain, Jasper National Park

Protecting the Woodland Caribou in Jasper



Woodland caribou are in danger of dying out in Canada. There are more caribou in Jasper National Park than anywhere else in Canada, but their numbers are getting smaller. To protect the animals, Parks Canada is changing hiking rules in the park. Dogs are not allowed where the caribou roam. During the season when the calves are born, hikers must stay on main trails to avoid the animals.

Skill Smart

With a partner, find out more about the protected plants and animals in Jasper. Look in three different sources. Try books, the Internet, or interview an adult. Use computer files to organize the information you find.

Banff National Park

Banff National Park has a wide variety of natural features. No wonder it has three million visitors every year!



Moraine Lake and the Valley of the Ten Peaks. Banff National Park preserves many natural features for future generations.



Grizzly bears in Banff National Park. Elk and white-tailed deer are among the animals protected in the park.



There is a lot to do in Banff National Park. Would you enjoy this activity?



Lake Louise. This is one of the most photographed lakes in the world.

Thinking It Through

How does Banff National Park help protect and preserve Alberta's natural environment?

ALBERTA VOICES

Gold Medal Dreams

I am training to be a downhill skier. My dream is to represent Canada in the Olympics. My favourite place is Banff. The scenery is fabulous, and they say the skiing is the best in the world. I am lucky to live close to the mountains.

Emilie Tremblay

My Visit to Banff

My dad says everyone has a favourite activity at Banff National Park. I had two! The first was a trip in a gondola up Sulfur Mountain. What a great way to travel all the way up the mountain in just eight minutes. And what a great view from the top!



My other favourite activity was our visit to the Cave and Basin Hot Springs, filled with warm water that comes from deep under the ground. The water smells like rotten eggs. Dad said it was because of the sulfur—a mineral that's found in the earth. We weren't allowed

to go into these pools because we would disturb the Banff Springs snails. These snails are not found anywhere else in the world, and they are in danger of dying out. I'm glad that the snails are protected. They help to make Alberta unique.

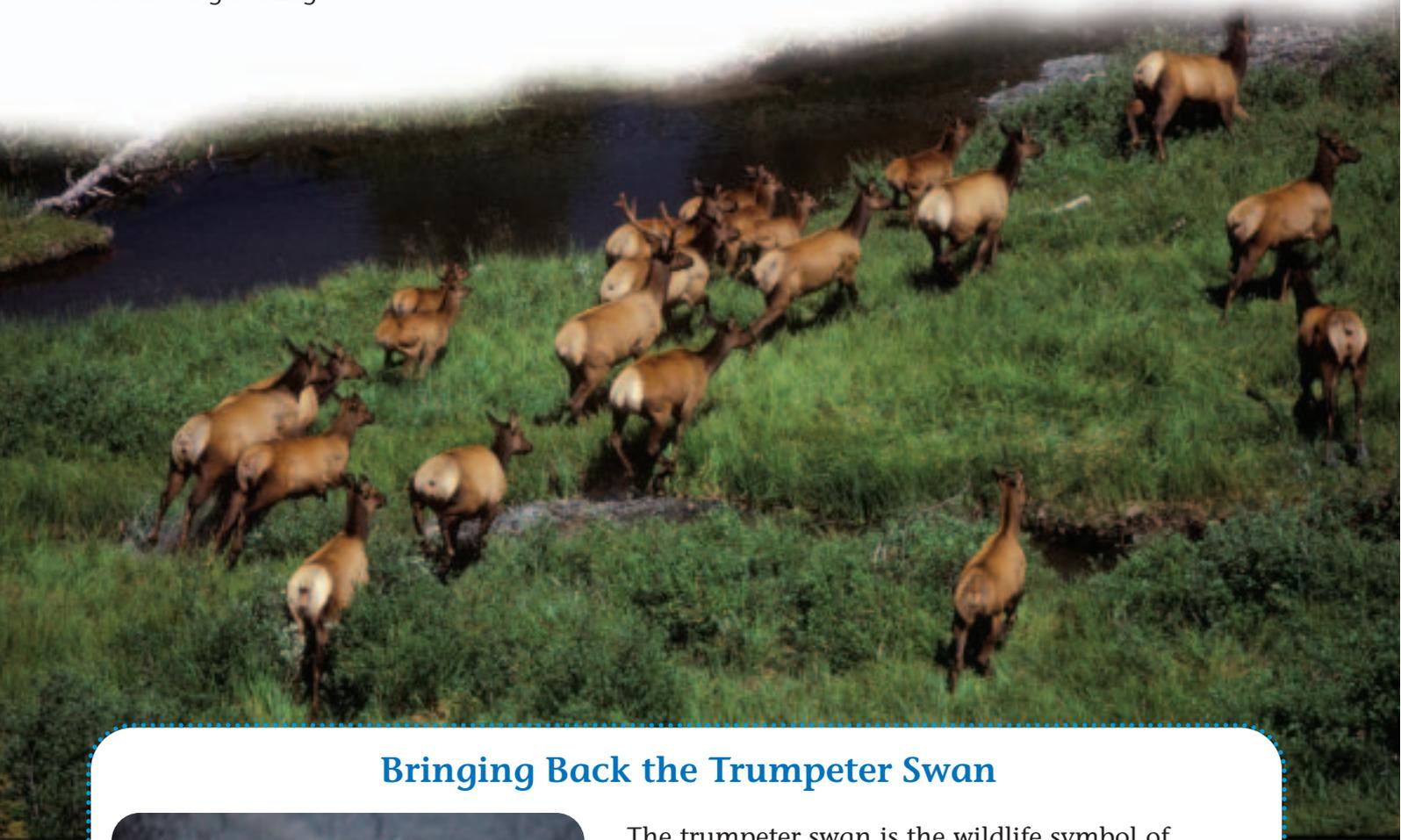
Elk Island National Park



Visitors to Elk Island National Park can go boating on Astotin Lake. In winter, they can go snowshoeing or skiing.

Elk Island National Park is less than an hour away from Edmonton. The park protects an area of wilderness parkland. This is one of the most endangered habitats in Alberta.

Although it is the smallest of Alberta's national parks, Elk Island is home to a host of animals. As well as plains and wood buffalo, it has moose, deer, coyotes, beaver, and at least 250 types of birds. It also has lots of elk, of course, as you can see below.



Bringing Back the Trumpeter Swan

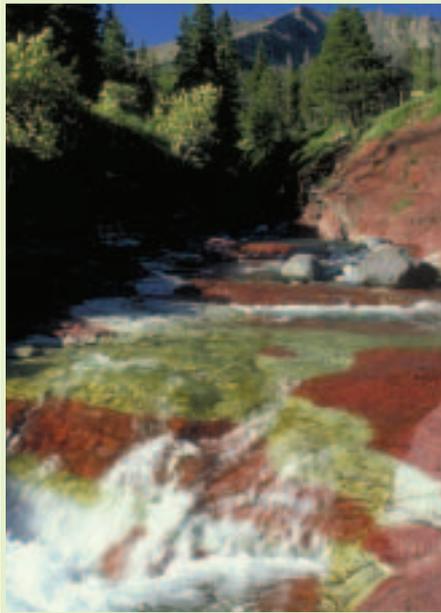


The trumpeter swan is the wildlife symbol of Grande Prairie, about five hours northwest of Elk Island. There used to be many trumpeter swans in Alberta, but they haven't lived in Elk Island National Park for over 100 years. They disappeared because of overhunting. Elk Island is trying to bring the swans back. Future visitors will be able to enjoy seeing this beautiful bird.

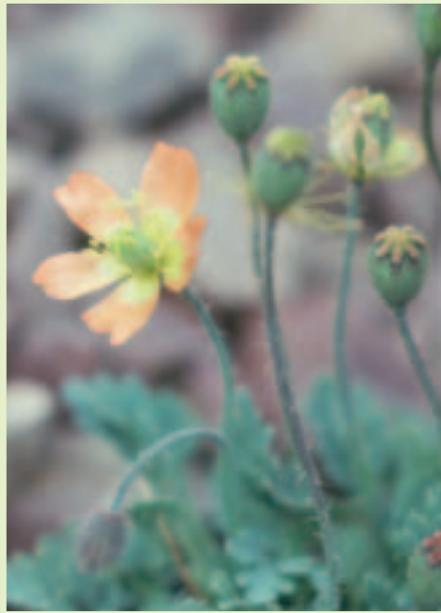
Waterton Lakes National Park

Waterton Lakes National Park has beautiful waterfalls, lakes, and prairie grasslands. Because of its climate, it also has a large number of plants and wildflowers.

Pygmy poppies have been found only in the Waterton Lakes area.



Red Rock Canyon in Waterton Lakes National Park is known for its red and green layers of rock.



Many types of flowers grow in the park, including pygmy poppies, shown here. These poppies are unique to the area.



Cougars can be found in the park. Bighorn sheep, deer, bears, moose, and many types of birds are also found here.

Skill Smart

Make a table similar to the one below to compare any two national parks in Alberta. Use books, magazines, or the Internet to help you find more information about the parks.

	<i>National Park</i>	<i>National Park</i>
<i>Natural features</i>		
<i>Wildlife</i>		
<i>Plants</i>		
<i>Activities</i>		

What Do Our Provincial Parks Preserve?



The parks and protected areas give us so many ways to enjoy the outdoors. They encourage us to visit parts of the province we may not have thought about otherwise.

Skill Smart

Use only the map to help you write a riddle. Use words such as *north, south, east, west, close, near, far*, etc. For example: Parts of this park are in southeast Alberta. It is the only park that crosses into another province. Which park is it? Share your riddles with a partner.

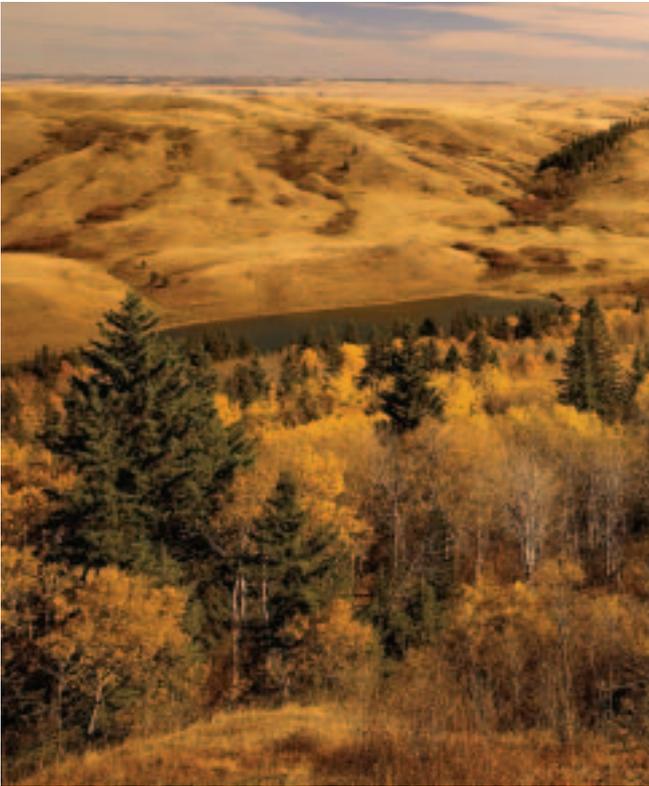
Provincial parks were created to preserve the variety of Alberta's natural and historical features. What can you tell about the number and range of provincial parks from this map?



Read on to learn more about six of Alberta's provincial parks. They are located in five different natural regions. As you read, think about how each park preserves a different aspect of Alberta's heritage.

Visit Some Provincial Parks

PRESERVING WILDLIFE AND PLANTS: CYPRESS HILLS



My family and I went on a camping trip to Cypress Hills Interprovincial Park. It's the only provincial park that crosses over two provinces—Alberta and Saskatchewan. As we got closer to the park, the hills just seemed to rise up out of the flat land around it. My dad says the park is sometimes called a forest island in a sea of grass. So the park preserves forests, streams, and hills in the middle of the prairie grasslands. The next day, we rode along the bike trail. We kept an eye out for the wild turkeys and some of the 14 types of orchids that grow in the park.

Gordon Woo

PRESERVING HABITATS: OBED LAKE

Last year, my mom took me kayaking at Obed Lake near Hinton. The park protects a wetland area where many animals and birds live. I used our binoculars to look for birds. I saw lots of them, and I could also see fish under the clear water. I saw some elk, but didn't spot any moose. It was so quiet and peaceful—and fun too!

Daniel Cliche



PRESERVING NATURAL AND CULTURAL HERITAGE: DRY ISLAND BUFFALO JUMP

I live near Huxley. I have been going to Dry Island Buffalo Jump, in the badlands, since I was a little boy. I never tire of seeing the cliffs and thinking of how animals once stampeded over the edge. And I enjoy looking at the hoodoos. When I was a boy, this area was not protected. People in the community worked hard to convince the government to make it a park. I'm glad they did—aren't you?

Louis Whitford



PROVIDING RECREATION: CANMORE NORDIC CENTRE



I volunteer at the Canmore Nordic Centre Provincial Park. People ski here in the winter and ride their bikes in the summer. I like it best when there's a race. My job is to make sure the spectators stay back from the start and finish lines. In summer, my favourite event is the mountain bike race. Some racers go for 24 hours straight! In winter, I really enjoy the cross-country skiing events. I like being out in the crisp air, and the scenery is breathtaking.

Jane Schmidt

A racer at the Canmore Nordic Centre mountain-bike race, held every summer

PRESERVING CULTURAL HERITAGE: DUNVEGAN

My brother and I spent the day at Dunvegan Provincial Park and Historic Site. Dunvegan was one of Alberta's first trading posts and missionary centres. Some of the old buildings have been restored so we can see what life was like back then. There are also gardens where fruits and vegetables are grown as they were in the past.

Sammy Malic



PRESERVING CULTURAL HERITAGE: WRITING-ON-STONE



My parents took me to Writing-On-Stone Provincial Park. It is near the town of Milk River in the badlands. I saw images that First Nations people in this area carved in the rock. Some of the carvings were over 3000 years old! The South Piikani people lived in this area. They believed it was a sacred place. Their drawings show that this place was very important to them.

Olivia Hubahib

The Milk River at Writing-On-Stone Provincial Park

How Can We Preserve Our Parks?



I am going to make a chart on the computer to share what I know about protecting natural areas.

words matter!

Tourism is touring or travelling to see and enjoy places away from home.

You have learned that governments are responsible for Alberta's parks and protected areas. Who else do you think is responsible?

Millions of people from Alberta and around the world visit the parks every year. Many communities depend on **tourism**. Tourists spend money in the hotels, restaurants, and stores near the parks. Many Albertans work in hotels and museums or as tour guides and instructors. Tourism benefits Alberta, but it can also cause problems.

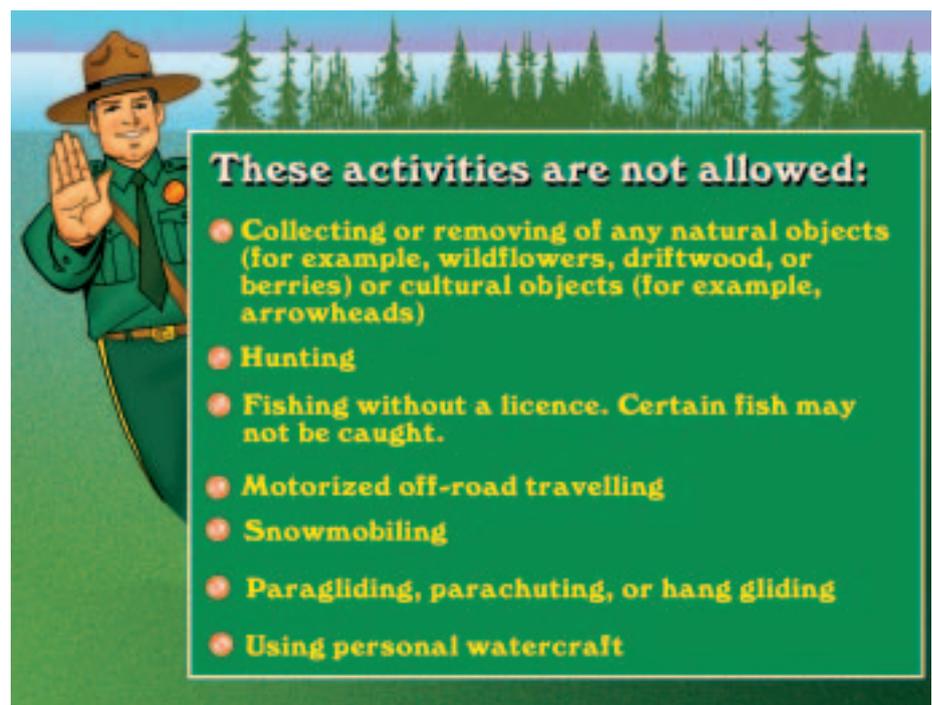
Think of what might happen in a natural area when many people come to see it. People might leave litter. Their vehicles might cause pollution or injure animals. Careless campers might cause fires. Can you think of other effects tourists could have on parks?

What Can Visitors Do?

Most parks have rules similar to the ones below. How does obeying the rules help preserve the park?

Thinking It Through

- What are some things you might do to care for the environment when you visit parks?
- Should you show the same care in other natural areas? Why? Explain.



Be a Thoughtful Visitor

Justin wanted to know how tourists and animals can share Alberta's parks. He interviewed Derek Tilson, a Park Warden at Waterton Lakes National Park. Read on to see what he found out.



Does tourism affect animals in the park?

Tourists enjoy the wildlife very much, so they sometimes want to get too close to the animals. Some even feed the mule-deer and big-horned sheep. These animals become used to people, so they aren't afraid to go into the town site. This can be dangerous. Their horns or antlers can get caught in fencing. Some animals are run over by cars, too.

Does tourism affect other animals?

If campers leave food around, bears come looking for it. Then we have to move the bears somewhere else. In the worst case, the bear has to be destroyed. But we try not to do this.

Does the park teach tourists about living with wildlife?

We ask people to put everything in their vehicles when they are not on their campsite. Pots, pans, and even bars of soap attract wildlife. We tell campers when they check in, and there are signs everywhere in the park.

Can tourists and animals share the park?

I think so, but tourists should keep a safe distance away from wildlife. Use binoculars to view them. Respect the wildlife in the park.

Skill Smart

Write down some other questions you would like to ask a park warden. See if you can find answers from other sources.



What Can Residents Do?



What do you think this sign means?

People do live in some park areas, but there are rules for these people, too. For example, the town of Banff is located in Banff National Park. There is a rule that Banff cannot have more than 10 000 people living permanently in the town. The residents must have a job there or be related to someone who is working there. Why do you think this rule was made?

People who live in park townsites are careful not to leave food and garbage out, so they don't attract the animals. They also encourage wildlife to stay away. In the town of Banff, the elk are chased away by people waving hockey sticks!



The town of Banff. Why do you think people might want to live here?

Thinking It Through

Why do you think it is important to protect parks for future generations? Discuss your thoughts as a class.

What Can You Do?

Anyone who visits a park or protected area can make a difference. You can obey park rules and learn about the park environment. You can try to leave as little mark as possible on the parks. Even if you have never been to a park or protected area, you can learn about the natural environment, and appreciate the role that parks play. With your support, the parks and protected areas will still be beautiful for future generations.

Communicating Information

Information can be communicated in many ways. You can present what you have to say in any of the ways shown here, and more.

How do you choose which one to use? A lot depends on your purpose for communicating and your audience. Are you planning to inform, persuade, or entertain? Who is your audience? What kind of presentation might best help them understand what you have to say?

Telling	Writing	Showing
Speech Oral report Poem Song	Essay Written report Web site PowerPoint presentation	Posters Photographs Drawings Graphs and tables

Practise the Skill

Look back at the sign of park rules on page 256. Try to communicate the information in different ways. Remember to think about who your audience is first. You could

- give a speech
- create a PowerPoint presentation
- draw a poster

Which format do you think works best? Why?

Set Your Skills in Motion

Communicate Information

Think about the parks and protected areas you learned about in this chapter. Which place would you like to visit the most? Why? Look back to page 259 to see the different ways you might communicate. Pick a format. Use it to try to persuade your teacher to take you to your chosen park or natural area.



Create a PowerPoint Presentation

Work in small groups. Choose one endangered plant or animal in Alberta. Find out how Alberta's parks are helping to protect this type of animal or plant. Plan a short PowerPoint presentation for the class. Include details about whose responsibility it is to help protect these plants and animals. Include details about what responsible citizens can do to protect these plants and animals.

Create a Tourism Brochure

Make a brochure encouraging people to visit a national park in Alberta. What can you see and do? How does the park protect nature? Have fences been built? Are there hiking trails? Add some tips on how tourists can respect nature.

Report on a Newspaper Article

Find a newspaper, magazine, or Internet article on how any Alberta park is preserving its wildlife, plants, or landscape. Read the article once to identify the main idea. Read it again. What different viewpoints are included in the article? Share the main idea of the article and the different viewpoints with your class.



Look What You Have Learned!

Parks and protected areas are important because they preserve the natural landscape, plants, and animals that are special to an area. Tourists can visit parks to learn about Alberta's natural and cultural heritage. Tourism also brings money and jobs to the province. However, it's important that visitors and residents respect the park environment and wildlife and obey the rules. Parks and protected areas are all part of Alberta's identity.

Review the inquiry questions for this chapter:

- Why are provincial parks, protected areas, and national parks important?
- How do we protect Alberta's land and heritage?

Show what you have learned by making a chart. Collect information from the text that answers each inquiry question. If you can, add information from other sources. Be sure you include where you found different pieces of information.

Take Time to Reflect

Before you go on to the next chapter, think about what you have learned in this one. How did you communicate information in different ways? What did you learn that will help you share information more effectively in the next chapter?



Choose something from this chapter to save for your Alberta Treasure Chest.