"Look Dad, I caught another trilobite."
"Okay son, better put it back in the mud where it belongs."
"And watch out for those sea anenomes," adds Mom, always the worrier. It's a typical family picnic at Lake Louise — lounging on the beach, frolicking in the sea, and, of course, chasing trilobites. Suddenly the ground begins to rumble. Another earthquake!
"Don't worry kids, it's just the Pacific Ocean plate colliding with the North American plate, nothing to be alarmed about."
"But watch out for underwater landslides!" Mom reminds them. The rumbling stops. The kids begin playing again. A jellyfish floats lazily by as Dad peers westward towards a cluster of volcanic islands.

“You know, honey, I could swear those islands are closer to the shore than when I was a kid.” Ah yes, just another perfect day in Lake Louise. At least, another perfect day several hundred million years ago.

Of course, things didn’t happen quite that quickly, and there were no people back then, either. No Banff National Park, no Lake Louise — not even any dinosaurs. But an amazing story had begun. A story of immense power, of rock pushed half way across a continent, and of violent undersea landslides. A story of volcanic islands moving in from far, far away. And a story of primitive sea creatures — some so strange that even today we can only guess at what they looked like or how they lived. The story is “The Building of the Canadian Rockies.” And it’s the story being told in the new Lake Louise Visitor Centre.

Continued on page 2
The Lake Louise Visitor Centre is much more than just an information centre. A 25-minute stroll through the exhibit galleries and a multi-media show will take you on an exciting 600 million year journey. From "Death of a Great Landscape" to "The Final Touches," you can step back in time and discover how the Rocky Mountains came to be. And to complete the story, there are exhibits highlighting the more recent natural and human history of the Lake Louise area.

The Lake Louise Visitor Centre is open daily from 8 a.m. to 10 p.m. and admission is free. Information attendants, videos, a trip planner display, and 24-hour information monitors will also help you discover the Lake Louise we know today.

There are no more volcanic islands near Lake Louise. No more trilobites. No more jellyfish. But the mountains, glaciers, and grizzlies of today are an impressive conclusion to a 600 million year story. A story, of course, that never really ends.

**LAKE LOUISE VISITOR CENTRE**

**WHERE:** In the village of Lake Louise, next to the Samson Mall.

**SUMMER HOURS:** 8 a.m. to 10 p.m. daily.

**INFORMATION MONITOR:** Accessible 24 hours a day.

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**A New Banff is Born**

**Town of BANFF**

The town of Banff celebrated its first birthday this year, even though it’s been around for more than a century. Under the National Parks Act, the town had been under the jurisdiction of the federal government since the establishment of Banff National Park in 1885. After years of negotiation aimed at protecting the surrounding national park, the town of Banff was granted autonomy on January 1, 1990.

The town’s first elected mayor, Leslie Taylor, has worked in the past for the Canadian Parks Service — first as an interpretive naturalist, and eventually as acting park superintendent in Banff. Regarding the unique environmental concerns of a townsites situated within a national park, Ms. Taylor states:

"We are proud of our status as a national park town and want to do everything we can to co-operate with the park. People in Banff want to see the natural beauty of our town preserved — we want green not glitzy."

The municipality has taken over the responsibilities of looking after Banff’s roads, utilities, and waste. The Canadian Parks Service will continue to operate park-based facilities and services in the townsites.

"Thousands of tired, nerve shaken, over civilized people are beginning to find out that going to the mountains is going home; that wilderness is a necessity and that mountain parks and reservations are useful not only as fountains of timber and rivers, but as fountains of life."

*James Barnard Harkin, Commissioner of Dominion Parks, 1918*

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**Superintendent’s Letter**

Welcome to Banff National Park, Canada’s first and most visited national park. Set in the splendour of Alberta’s Rocky Mountains, this park symbolizes the commitment of the Government of Canada to protect for all time outstanding areas of Canada’s ecological regions.

As well as spectacular scenery and wildlife, this national park offers the opportunity for each of us to contemplate the future environment of our planet. During your visit I hope you will take advantage of our park interpretive programs. They offer insights into our cultural and natural heritage, and what we can all do to help protect it.

In this issue of *The Mountain Guide*, we present the perspectives of some leading Canadians active in promoting environmental awareness and protection. The urgent need to better manage our planet’s natural resources may seem to diminish within the protected atmosphere of a national park. But we too have concerns.

Poaching is a continuing problem, as is wildlife mortality on our highways. Protecting park resources requires the installation of costly and sophisticated waste treatment systems. Any development designed to increase park use may diminish wildlife habitat. Park decisions for the future must increasingly be based on a primary concern for resource protection needs, rather than on opportunities for economic gain.

Banff is a busy place. Each year more than 4,000,000 people visit the park. The challenge is to ensure that there will always be a wilderness here for us to experience.

I join the many partners we have in the public and private sector who are dedicated to making your stay in Banff National Park a rewarding one. We welcome the support of park businesses in making this publication available. Enjoy your stay, and this issue of *The Mountain Guide*.

Dave Day
Superintendent

*The Mountain Guide* is made possible by the contributions of Donna Bohoslowich, Terry Davis, Heather Dempsey, Carolyn Fysh, Glynnis Hood, Michael Kerr, Rosanne Konrad, Rick Kunelius, Karen McDermid, Ann Morrow, Shirley Truscott, Tom Ulrich, Babe Wanamaker, Jeff Waugh, Al Williams, and Yedida Zelig. Some photographs are printed through the courtesy of the Whyte Museum Archives. Produced by Community Affairs, Western Regional Office, Calgary.
Help Preserve Banff

CAMPING:
- Frontcountry (car) campers must purchase a camping permit from campground kiosks. Backcountry campers require a free backcountry use permit which is available at information centres or warden offices.
- Camping is permitted only in designated campsites, except in remote wilderness areas. Random camping is illegal.
- Campfires are permitted only in designated fireboxes, except in remote wilderness areas.
- Camping permit holders are responsible for both the conditions of their campsite and the actions of their camping party members and guests. No objectionable disturbance or unreasonable noise will be allowed at any time.
- Food (including food in coolers) and garbage must be either stored properly inside vehicle trunks or bear-proof caches or disposed of in bear-proof garbage bins. Campsite cleanliness helps eliminate wildlife problems in campgrounds.

Violation of the national park regulations can result in eviction from the park or fines of up to $2,000.

Wildlife Watch

Wildlife Watch is Banff’s public awareness program designed to stop poachers before they kill priceless park animals.

You can help in the fight against poaching by reporting any suspicious activities involving people, guns, and wildlife to the Banff Warden Office at 762-4506. DO NOT APPROACH THE PEOPLE INVOLVED. Be discreet and accurately record the date, time, location, vehicle license number, description of vehicle and persons involved, and any other details of the occurrence.

The park is also interested in reports of fishing violations, harassment or feeding of wildlife, and bear sightings. With your help we can better protect our wildlife — and our visitors.

For more information on Wildlife Watch and how you can help, phone 762-3324 or write Wildlife Watch, % The Superintendent, Banff National Park, Box 900, Banff, Alberta, T0L 0C0.

TO REPORT WILDLIFE VIOLATIONS PHONE:
In Banff National Park ............................................. 762-4506
In Alberta ................................................................. 1-800-642-3800
In British Columbia ............................................. 1-800-663-WILD (9453)

All information is treated with strict confidence.

Animal Talk

Some animals even “speak” to their enemies. It used to be thought that the pika’s shrill “EEEP” and the white-tailed deer’s flag-like raised tail are meant to tell other members of the group that a potential predator is nearby. However, recent studies have revealed that these signals may actually be directed towards the would-be predator. The animal is saying, in effect, “I see you and can get away from you, so don’t bother trying to attack me.” The studies have found that deer surprised at close distances, when they would be less likely to get away, do not raise their tails but simply get going.

All creatures, from earthworms to grizzly bears, communicate in some way or another through chemical, visual, vocal, or tactile means. Whether we understand these animals or not depends on how carefully we watch them. In some cases though, as with the elk, once you get the gist of the conversation, it’s best not to stay around to hear it said more “loudly” the next time!
The Wonder Trail

Back in the good old days if you wanted to get from Lake Louise to Jasper you did it on horseback. Those hardy souls who took the 25 day packtrain trip had to crash through fallen timber, climb over passes, ford rushing rivers, and battle the elements along the way. They called it the Wonder Trail.

For the last 50 years, though, millions of visitors have enjoyed the wonders between Lake Louise and Jasper in comfort — on the road now known as the Icefields Parkway. This 230 km (143 mile) road winds its way past some of the most spectacular scenery in Canada. Rugged snow-capped mountains, glaciers, waterfalls, silt-laden rivers, and turquoise lakes are all waiting around the next turn.

The landscape also abounds with wildlife. Keep an eye out for grizzlies grazing along the roadside, bighorn sheep near the Saskatchewan River Crossing, mountain goats on Mt. Wilson, moose in the wetlands, coyotes along the entire route, and, north in Jasper National Park, mountain caribou. Remember, however, that these animals are wild and deserve respect — so please enjoy them from a safe distance.

Although one can travel the highway in four hours, you may wish to take an entire day to really experience the Wonder Trail of today. Roadside interpretive signs, the Icefields Centre, and a roving interpretive trailer explain the natural and cultural history of the area. Viewpoints, picnic sites, campgrounds, and easy access trails (such as those to Mistaya Canyon, Bow Summit, and Parker Ridge) give you a chance to stop and explore along the way. To make sure you don’t miss anything, pick up the free brochure, The Icefields Parkway, at a park information centre.

As you drive along the parkway, spare a thought for the old pony trail now lost beneath gravel and asphalt. In seven minutes you will travel a distance it would have taken the packtrains a whole day to cover! Think, too, of the sturdy men of half a century ago, who, for 45 cents an hour and all the beans they could eat, laboured for ten years to build the first road here.

Watch for the Icefields Parkway’s 50th anniversary celebrations this summer in Banff and Jasper national parks.

The Ones That Get Away

One warm day in 1925, a hatchery truck carrying 45,000 fingerling brown trout broke down on the Trans-Canada Highway just east of Banff. The driver, fearing that his cargo would perish if left in the truck, did what seemed to be the right thing at the time — he dumped the young trout into a nearby stream. The brown trout eventually followed the creek down into the Bow River, and their offspring have lived there ever since.

Though probably the least planned, this was not the first incidence of fish stocking in Banff National Park. Employees of the Canadian Pacific Railway had already introduced eastern brook and rainbow trout into the Bow River as early as the turn of the century. Stories of the park’s abundant fish were luring in tourists by the train wagon-full. Fish stocking was necessary to appease the voracious appetites of Banff’s early fisherman — and women. In 1906, one of these women boasted that “in an hour, 13 trout varying from one-half to two pounds would be in my creel.”

Such bounty could not last long. The cold and often silty waters of these mountains cannot support large numbers of fish, wild or stocked. Many of the exotic species that were brought in did not survive. On the other hand, some foreign fish did alarmingly well in their new surroundings. The native fish populations, suffering from competition for food and spawning sites, declined.

The actions of the past cannot be undone, but we can learn from them. Non-indigenous fish are no longer being deliberately introduced into park waters. Some highly fished roadside ponds are still stocked on occasion, but only with native species. Catch and release fishing is encouraged. The more fish that are allowed to “get away” today, the more there will be for the future.

One way you can enjoy the fish in Banff National Park is simply by watching them. It helps to know where to look, of course. If you are hiking by the outlet or inlet of an alpine lake in June you may find cutthroat trout spawning there. As you paddle on the Bow River you might see a bull trout resting on the bottom, or a school of mountain whitefish foraging in the current. You could even jump in for a closer look, if you’re feeling very brave. Some divers in Lake Minnewanka claim to have caught sight of a giant lake trout down in the murky depths — one to rival the record 43-pounder caught there in 1889! Not surprisingly, though, it always manages to get away.

A national park fishing permit is required to fish in any national park. To preserve fish populations in our mountain parks, daily catch limits have been reduced this year. For details see the brochure Fishing Regulations Summary, available wherever national park fishing permits are sold.
On the Lookout for Wolves

Radio collars and, in winter, tracks in the snow help the researchers find these elusive wild dogs. They have discovered that there are two packs that use the Bow Valley area. The northern pack consists of 8 wolves (4 black and 4 grey) that tend to travel together. The southern pack is also made up of about 8 wolves, but they are not found together often. The territory covered by each pack is about 1500 to 2000 square kilometres (930 to 1240 sq. miles), but not all of it is within the park.

Through observing these wolves and analyzing their faeces, the biologists have found that they are mainly preying on elk. "We have also found mountain goat, bighorn sheep, and moose bones near the den. Wolves will often eat beaver and porcupine, too," says Dave Huggard, pointing out that although wolves are capable predators, they are not always successful each time they hunt. They are also unlikely to approach people. "Wolves are generally shy of people," Paul Paquet says. "We're not worried about them hurting visitors. What we are concerned about is potential interactions between people and grizzly bears that have found a carcass left behind by a wolf." Bears may become dangerous at a kill site because they will aggressively defend such a food source. Paquet advises hikers to watch for signs that a wolf kill is nearby.

"If you see ravens circling overhead or hear their throaty calls, they may be scavenging on a kill, so it's best not to approach. You should leave the area immediately, and report your find to the Warden Service."

Not only grizzlies and ravens are benefitting from the return of the wolf. Crows, magpies, gray jays, bald and golden eagles, voles, coyotes, black bears, wolverines, and other weasels will also feed on wolf kills once the wolves have taken their fill. Dave Huggard has even noticed an American dipper feeding on fat globules washed downstream from a wolf kill. It seems that quite a few of our park residents — as well as our visitors — are now on the lookout for wolves.

A Mountain Oasis

The water is shallow, often only knee deep. Bubbles of gas rise out of the soft, deep ooze on the lake bottoms. Surrounding the water are extensive mud flats, and dead and dying trees. Can this really be one of Banff National Park's most exciting places to see wildlife?

The answer is yes. It's precisely these swamp-like features that make the Vermilion Lakes so attractive to many of the park's inhabitants — and to park visitors, too. The Vermilion Lakes are just a few minutes' drive or walk west of the town of Banff.

Elk, deer, and occasionally moose seek the lush plants growing here to graze and browse on. Coyotes, and sometimes wolves, patrol the shores on the lookout for their prey. Even black bears have been seen along the Vermilion Lakes, eating horsetails or berries — or just passing through.

Canada Geese nibble on the tender plants growing in the highly nutritious mud. Ducks dabble in the weeds. Shore birds probe for little creatures living in the slime. Fish, such as the long-nosed sucker, feed on the abundant insect and invertebrate life of the lakes and are, in turn, hunted by osprey and bald eagles. The massive nests of these birds, and often the birds themselves, are easy to spot in the dead trees.

These trees drowned over a decade ago — the result of a beaver dam that later collapsed when the beavers left in search of better stands of aspen or poplar. In time, the dead spruce trees will fall, the mudflats will become meadows, and the area will open up for the growth of light-loving poplars and willows.

Then, no doubt, the beavers will be back to continue this wetlands cycle of change.

The Vermilion Lakes are perhaps not as dramatic as the impressive peaks reflected in their calm waters. But those who take the time to explore them will find a haven of life and beauty — truly a mountain oasis.
Be Prepared!

Banff National Park protects some of the world’s most beautiful wilderness, but nature hides many potential hazards for those who venture into the great outdoors.

“Death confronted the backwoods traveller in quite a remarkable variety of shapes,” one early visitor said. “If we did not break our necks on the mountains, we gathered it would be hard lines if some member of the outfit did not die of sunstroke, get burned in bed, be slain by falling trees, or drown while fording the rivers.” To this somewhat morbid list we can add the possibilities of hypothermia, avalanches and rock slides, bear encounters, and simply getting lost.

Statistically, travelling in the remote parts of our park is still safer than driving a car. But anyone heading out into the wilderness should be well prepared to deal with (or better yet, prevent) a wide range of potential “adventures.” Once you leave the townsite, your safety is in your own hands!

Park information centres and warden offices in Banff and Lake Louise can provide you with backcountry information, brochures, and maps. Call 762-3600 for an update on trail conditions in summer and avalanche hazards in winter, and 762-2088 for local weather forecasts. It’s also a good idea to read up on where you’re going. Guidebooks are available at bookstores in Banff and Lake Louise.

If you’ll be staying overnight in the backcountry you must pick up a free Park Use Permit at information centres or warden offices in the park. There is a voluntary registration system for those planning to engage in high risk activities, such as climbing, glacier travel, ski touring, or hiking alone. You must register back in at the end of your trip if you register out. Whether you register or not, you should always tell a responsible friend where you’re going, what you’ll be doing, and when you plan to be back so that this information can be passed on to rescue wardens if you don’t return on time.

Make sure you have the proper equipment for your activity and for possible complications along the way. Should you get into a situation where you need help, remember that most rescues can only take place during daylight and in good weather. It pays to be prepared to stay out at least one extra night after you expect to be back — just in case.

The Interpretive Service has prepared a series of short videos called “Backcountry Hints” with information to help you avoid hazardous situations. They play continuously at the Banff and Lake Louise information centres, and are also shown on Banff cable TV (Channel 10).

Trail Mix

First, take 6,641 square kilometres of the Canadian Rockies and set it aside for all time — to remain unimpaired for the benefit, education, and enjoyment of future generations. Then, for the pleasure of present generations, divide the entire lump into two main portions: a relatively small, accessible frontcountry and a large, remote backcountry. (Note: For best results when making this kind of preserve, further divide backcountry portion into two approximately equal areas: Semi-primitive/Primitive, which will be garnished to suit many tastes, and Primitive/Wildland, which should be savoured “au naturel,” if at all.)

Next, criss-cross the whole thing with trails. Frontcountry trails will take a great deal of time, energy, and expense to harden (you may use gravel, cinder, wood, or, in the winter, track-setting equipment). If there are any of these resources left over — and there usually aren’t — carefully spread them over some of the backcountry trails, too. However, don’t be disappointed if the trails here end up muddy, rutted, braided, washed out, or indistinct in some places, in spite of your best efforts.

Now dot this trail system with campgrounds. To the frontcountry, add road access, plug-ins, showers, and flush toilets. You won’t need any fancy ingredients for the backcountry — just spice up the Semi-primitive/Primitive portion with a few flat spots for tents, an animal-proof place to hang food, a biffy, and, where fires are permitted, a metal firebox. Leave the Primitive/Wildland portion plain.

Finally, scatter numerous hikers and an assortment of horseback-riders, mountain bikers, and cross-country skiers throughout this concoction and let simmer for a while. You could have yourself quite a stew. Or a very modern kind of trail mix.

With so many people getting a “taste” of the park these days there are many recipes for conflict. Hikers bemoan the mud, ruts, and aromatic trail additions left behind by a string of horses. Horse-back riders complain that their mounts are being spooked by mountain bikes. Cross-country skiers lament the fact that dogs can ruin the track and cause an undesirable “brown wax” to accumulate on their skis.

It may be that in the future we will need a few more regulations to make all of these seemingly incompatible ingredients blend better. What we should do now, though, is add a generous measure of consideration for others to our Banff National Park trail mix.

See the free brochure, Backcountry Visitor’s Guide, for more information about backcountry travel, facilities, and regulations.
Imagine you and your family enjoying dinner at home. Suddenly, the hair on the back of your neck rises as you look up from the table to see six pairs of beady little eyes staring at you. It’s those nosy ground squirrels again! You try to ignore them, but they start tossing beetles at you — after all, they like beetles so why shouldn’t you!

Thinking you could do with a little privacy, you head over to the couch for a nap. But what’s this? A family of grizzly bears is at the window! They soon bored with watching you rest, and begin to climb right into your living room. One of them even tries to paw at you!

How would you feel? Probably a little scared, quite nervous, and maybe even downright angry. After all, you’re just trying to relax in your own home, right? Now imagine the reverse of this scenario. A child offers peanuts to ground squirrels at a picnic area. A photographer inches nearer and nearer to a resting elk. A throng of people crowd around a grizzly as she feeds along the side of the Icefields Parkway.

While it’s exciting to see Banff’s wonderful wildlife up close, these encounters can be dangerous — for you and the animals. Wildlife “jams” on the highway are accidents waiting to happen. Cars stop in the middle of the road (usually with no warning) and people mill about, heedless of traffic. And you can add to this danger the fact that wild animals may defend themselves if approached too closely. Elk or deer can lash out with their powerful legs, bears may charge, and even those cute little ground squirrels can sport a vicious bite.

Usually, though, it is the animal itself that suffers. Most visitors know that it’s illegal to feed wildlife in national parks, but few realize that simply approaching an animal or enticing it may also jeopardize its life. Animals are often spooked onto the highway by over-eager watchers, or attracted there by the promise of food. Once on the road, they stand a good chance of becoming just another road-kill statistic.

Finally, there’s the danger of turning our wildlife into something that’s less than wild. Is there a difference between animals and wildlife? In a big way, yes. Animals are what we see in the zoo, or have as pets. Wildlife is what we have here — wild life, living in their home, Banff National Park. If we want to continue to enjoy the privilege of seeing them in their natural environment, we must all try to behave as proper guests should — with courtesy and respect.

So the next time you have the urge to feed a ground squirrel, don’t! If you must get a close-up shot of that elk, use a longer lens and let him rest in peace. And if you see a bear along the highway, please enjoy her from the safety of your car. Only with your help will we be able to keep the wildlife of Banff National Park wild... and alive.

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You are in Wildlife Country

Dandelions, Horsetails, Black Bears, and You

Did you know that from mid-June to mid-July black bears in Banff National Park eat mostly ants? Or that there are only half as many black bears here as there are grizzly bears? Well, we didn’t either, until recently!

A three-year black bear study in the park has revealed these surprising facts and provided us with the information necessary to make better bear management decisions in the future.

Back in the days when there were garbage dumps in the park (and when people routinely fed bears at picnic sites, campgrounds, and along highways), black bears were a common sight here. They seemed quite “tame” — usually. But they were big and strong, and had become unnaturally bold around people. Ever hungry, these “garbage” bears sometimes damaged vehicles and camping equipment in search of tasty tidbits. Occasionally they injured people, sometimes fatally. After all, they had plenty of opportunity to make the association between humans and an easy meal.

In the past decade we have tried to undo the damage done to our “wild” bears, and to prevent further damage to people and property. We now haul all of our food refuse out of the park, and our garbage containers are bear-proof. Through public education and law enforcement, we try to ensure that human food or garbage is not accessible to bears in campgrounds or elsewhere. As a result of these efforts, the black bears in Banff National Park have returned, for the most part, to a more natural diet: horsetails, grasses, and dandelions in the spring and early summer; mainly ants and ant larvae during mid-summer; almost exclusively buffalo berries from mid-July to the end of August; and crowberries, bearberries, juniper berries, and whitebark pine nuts in the early fall.

The bears have also returned to a more natural size and population density — natural for this environment, at least.

Because of its elevation and climate, Banff National Park provides only marginal black bear habitat. Although black bears tend to stay in the valleys and grizzly bears in the higher alpine, the ranges of these two species do overlap in the sub-alpine regions — and grizzlies can easily chase away black bears from prime feeding areas. Because of this, black bears are relatively small here. The largest black bear captured during the study weighed less than 115 kg (250 lbs.). Researchers also discovered that there are at most 50 black bears in all of Banff National Park, a much smaller number than had been estimated previously.

With so few black bears living in the park, and because they inhabit the most highly-visited areas of the park, we have to manage our black bears carefully to ensure their survival. In the past, “problem” bears were simply shot, or removed to other areas. Relocation, however, has not worked well here. Some bears have been forced out of the park altogether by competition with other bears at the relocation site. Many eventually found their way back to their old haunts and had to be destroyed. Even if a bear is removed successfully, another soon takes its place, and may also become a “problem” bear.

The only real solution is to prevent human/bear conflicts in the first place. Over four million people visit Banff every year, and it’s up to each one of us to make sure that we don’t — deliberately or unwittingly — substitute human food or garbage for the dandelions, horsetails, ants, and berries that our black bears naturally enjoy.
What’s that bird?

Our handy mountain birds may be new to you. Meet three of our year-round residents, all cousins of the crow.

Common Raven: You can tell the raven from its smaller relative, the crow, by the shape of its tail in flight. The raven’s tail fans out to a wedge shape; the crow’s tail has a straighter edge. Ravens are efficient scavengers and have an impressive repertoire of vocalizations.

Black-Billed Magpie: This bird, with a “tux and tails” of black and white and a dashing gloss of greenish-blue, is an import from Europe that has done very well here. The name, a shortened version of “maggot pie,” comes from the bird’s habit of flipping cowpies in search of insects and insect larvae.

Clark’s Nutcracker: You can distinguish this particular “camp robber” from another grey bird that may also try to steal your lunch (the gray jay) by the nutcracker’s long, dark bill, dark tail and dark wings with white patches. The long bill is used to extract seeds from cones and then to tuck them away into various storage spots for the winter.

Deer me, is that an elk?

There are five members of the deer family that live in Banff National Park. The antlers of each species are distinctive, but with the exception of caribou, only the males grow them.

Elk or Wapiti: This is the ungulate you are most likely to see around the Banff townsite. Look for a white rump patch (wapiti is an Indian word meaning white rump), a very short tail, and a reddish-brown coat with a darker neck.

Mule Deer: Mule deer are named for their ovenized ears. Much smaller than elk, they have a small white rump patch and a narrow, black-tipped tail.

White-tailed Deer: White-tailed deer are slightly smaller than mule deer in the park. When fleeking, this deer raises its wide tail to reveal a conspicuous white “flag.”

Moose: The moose is easily identified by its large size, dark brown colour, distinctive profile, and the dewlap (or “bell”) hanging from its throat.

Caribou: Caribou have a dark coat with white trim around the neck. They are found only in the extreme northern part of the park — and on the “tails” side of a Canadian quarter.

The Personal Nature of Wilderness

R. W. Sandford

The increasing global importance of national parks is easier to explain than the significance of one specific wilderness experience. For a solitary wanderer, at the level of the individual, the value of a park like Banff enters the realm of the personal and the spiritual. Fortunately, the personal meaning of any experience can be hard to articulate. Spiritual experiences, by their very nature, similarly defy direct description — a fact that in every culture necessitates the creation of sacred places. Unfor­tunately, the personal meaning of any experience can be hard to articulate. Spiritual experiences, by their very nature, similarly defy direct description — a fact that in every culture necessitates the creation of sacred places.

R. W. Sandford has lived in the Rockies for twenty years. He works as a natural and human history consultant, writer and film maker.
So Near and Yet So Far

Tired of the hustle and bustle of Banff Avenue? Why not get away from it all — on top of a mountain!

From the middle of the busy Banff townsite, the mountains seem to be simply a backdrop, so near and yet so far from the bright lights and souvenir shops. Surprisingly, though, you don't have to drive far away from town to go "climb" a mountain. If it's Tunnel Mountain, you can walk there.

The trail to the top of Tunnel Mountain begins a few blocks east of Banff Avenue, on St. Julien Road. Even with several stops along the way (to admire the breath-taking views) you can reach the summit in less than two hours. The elevation gain from the trailhead is 293 metres (962 ft.), over a distance of 2.3 kilometres (1.4 miles).

The trail's lower switchbacks are shaded by tall, thin lodgepole pines and ancient, fire-scarred Douglas firs that are typical of the park's montane forests. Indian paintbrush, harebell, and brown-eyed Susan flowers add splashes of colour to the scene. As you climb, these are replaced by the blooms of arnica, bunchberry, and twinflower. The forest becomes a subalpine one at higher altitudes, and the trees are mainly spruce as you near the top.

Looking out along the Bow River from the trail's many viewpoints, you will see evidence of the huge "rivers" of ice that once filled this valley. The scouring action of tons of flowing ice carved this valley into its broad U-shape. The ice was sometimes so deep that glaciers entirely covered Tunnel Mountain, eroding it into a much more rounded shape than the nearby Cascade Mountain and Mount Rundle.

As you near the summit, look closely at the exposed mountain rock. You may see small, shell-like or tubular forms embedded in it. These fossils are signs of an even earlier time, when the rock layers which make up our mountains were being formed at the bottom of a warm, shallow sea.

The creatures of today, however, are much more likely to grab your attention and your lunch, if you let them (Please don't!). Golden-mantled ground squirrels pop up unexpectedly from their burrows in the ground, red squirrels scold noisily from the trees, and ravens swoop and soar overhead. From the top of the mountain, you'll have a bird's eye view, and know that you've earned it!

By the way, don't expect to pass through any tunnels on your way up. Early plans for the Canadian Pacific Railway did call for a tunnel through Tunnel Mountain, but only until an enterprising C.P.R. official discovered the less costly route around it.

Guided walks up Tunnel Mountain are offered by the Interpretive Service twice a week. See the centerfold schedule for this and other interpretive events.

EDITOR'S NOTE: The Rampart Creek campground was closed for the rest of the 1989 season, but is open and fully operational in 1990. Look for rock slide debris beside the Icefields Parkway.

Dear Mom:

You sure are missing a lot of excitement here in the mountains: glaciers, goats, grizzlies... and yesterday we even saw some erosion in action! I guess all the rain we've been having lately set some rock slides off. There was one huge one that came off Mt. Wilson just after we had crawled into our sleeping bags — you should have heard the noise it made! Tors and tons of rocks and mud barreling down the side of the mountain. It covered the highway, as you can see. Some of the boulders are almost as big as the bulldozers they're using to clear the road. Luckily, nobody got hurt. The Rampart Creek bridge was washed out by all the water, and the river is now flowing right through our campground and it has flooded out the picnic shelters. Oh well, it was time for us to move on anyway. They say the road should be open by tomorrow.

Bye for now, XXXX.

August 2, 1989
Why Did The Lamb Cross The Road?

To get to the other side, of course! And what about the elk, deer, moose, wolf, coyote, and bear? Probably for the same reason, but sometimes they're also attracted to our roads for other reasons — and the results are no joke.

Many animals are drawn to highways by the salt and lush vegetation they find there, and (sad but true) by the garbage and handouts they are sometimes offered. Roads are a necessity for us, but they usually cut right through prime wildlife habitat. Unfortunately, not all animals know to look both ways before they cross the street. Close encounters between cars and animals can be deadly for all involved.

In some places, vehicle/animal accidents are putting a considerable dent in wildlife populations. In the past ten years, more than one thousand large animals (and countless smaller ones) have been killed on Banff National Park’s highways.

On your travels you can prevent injury to yourself and to precious wildlife by following a few simple guidelines:

- **BE ALERT!** Always be on the lookout for wildlife near the highway. Scan the roadside ditches. Watch out if you see a single animal — there may be more! Remember, the behaviour of wildlife is unpredictable.

- Most wildlife/vehicle collisions occur between sunset and sunrise. At these times, be particularly watchful for signs of wildlife, such as the animal’s eyes reflecting in your headlights.

- Keep your headlights and windshield clean, especially at night and in bad weather when vision is less efficient.

- Use hazard lights to alert other drivers that animals are on or near the highway.

- Slow down! Reduce speed and be prepared to stop whenever you are in wildlife areas, and particularly when you see animals on or near the road. This is especially important at night — people who overdrive their headlights are a major cause of wildlife mortality.

If you do have the misfortune of hitting an animal on the road take note of where and when the accident occurred, as well as the condition and location of the animal, and report it to the Banff Warden Office (24-hour line: 762-4506). Wardens need this information for resource management and public safety reasons.

Passes to Safety

In Switzerland and England, toads have them. In Massachusetts, there’s one for salamanders. In Florida, panthers use them, and in Banff National Park we have eight of them for elk, deer, and whoever else cares to use them. What are they? Highway underpasses, of course.

When a section of the busy Trans-Canada Highway through the park was twinned in 1983 it was decided to fence the road in, for the safety of both wildlife and visitors. But most of our animals regularly move from one side of the Bow Valley to the other, and the fences would cut wildlife ranges in half and isolate the populations on either side. The solution to this dilemma was the building of wildlife walkways under the road.

This is the largest such project ever undertaken in North America, and park wardens have been monitoring how our wildlife have reacted to these new elements in their environment. The wardens were concerned that the animals might be so frightened by the constricted passages or by the noise of overhead traffic that they wouldn’t use the underpasses effectively. Another worry was that predators would find the underpasses convenient hunting grounds.

The wardens discovered that elk and deer (after an initial hesitancy) have become accustomed to the underpasses. Video monitors show that elk move through them in a slow, steady manner — alert, but not panicked. The tracks of coyotes, wolves, bears, sheep, moose, and even a cougar have also shown up in the sandy surfaces of the underpasses.

There has been no evidence that predators are taking advantage of the underpasses for hunting ungulates (hooved mammals). What some coyotes have learned to use, however, are the fences. The rocky cliffs near the Vermilion Lakes serve as traditional escape terrain for bighorn sheep. Coyotes appear to have pinned the bighorns against the highway fence running through this area, killing over 30 of them in the past two years. It could be that sheep simply do not perceive the wire mesh fence as a barrier. A highly visible green material has recently been attached to certain sections of the fence in an attempt to alleviate the problem.

Highway fencing has considerably reduced the number of road-kills in the park. In 1982, before any of the Trans-Canada was fenced, 57 large animals were killed on the 27 km (17 miles) of highway between the park’s East Gate and the Sunshine Village turn-off. After fencing, that same stretch of road claimed the lives of only 7 ungulates in 1989 — 6 elk and 1 deer that somehow got around the fence.

In preventing wildlife highway deaths, there’s no substitute for careful drivers. But roadside fencing has proven to be a valuable tool in protecting Banff’s wildlife.
The park's natural and cultural history is brought to life through a variety of free events, including guided walks, evening theatre programs, and roving exhibits. So join us for an exciting look at Banff National Park!

**Banff Townsite (June 25 - Sept. 2)**

- **Monday**
  - 2 p.m. Exotic Aquatics (E)
  - 7 p.m. Vermilion Lakes Walk (A)
  - 8 p.m. Information Centre Theatre
- **Tuesday**
  - 10 a.m. Historic Walking Tour - FRENCH (D)
  - 2 p.m. Minnewanka Lakeshore Stroll (B)
  - 8 p.m. Tunnel Mountain (hookups)
- **Wednesday**
  - 10 a.m. Tunnel Mountain Walk (C)
  - 2 p.m. Cave & Basin Nature Walk (F)
  - 8 p.m. Information Centre Theatre
- **Thursday**
  - 8 a.m. Vermilion Lakes Walk (A)
  - 2 p.m. Exotic Aquatics (E)
  - 8 p.m. Tunnel Mountain (hookups)
- **Friday**
  - 2 p.m. Historic Walking Tour - ENGLISH (D)
  - 8 p.m. Information Centre Theatre
- **Saturday**
  - 10 a.m. Minnewanka Lakeshore Stroll (B)
  - 2 p.m. Cave & Basin Nature Walk (F)
- **Sunday**
  - 10 a.m. Tunnel Mountain Walk (C)
  - 8 p.m. Information Centre Theatre

**Around the Town**

A. VERMILION LAKES WALK: Varied lakeshore habitats make the Vermilion Lakes one of the richest bird and wildlife areas in the park. Learn more about Banff's wetlands on this leisurely two-hour stroll that begins at the first lake on Vermilion Lakes Drive, 1.3 kilometres (0.8 miles) from Banff townsite. Meet just beyond the food concession at the Lake Minnewanka Campground Theatre. **10 p.m. June 25 - August 5**

B. MINNEWANKA LAKESHORE WALK: Minnewanka, "Lake of the Water Spirit," has witnessed an intriguing history of human activity. Discover why, on this pleasant two-hour walk along the shore of Banff's largest lake. Meet just beyond the food concession at the Lake Minnewanka picnic area. Tuesday 2 p.m. & Saturday 10 a.m.

C. TUNNEL MOUNTAIN WALK: This is your chance to climb a mountain in Banff National Park! Spectacular views of the Bow Valley will be your reward at the top. Meet at the trailhead parking lot on St. Julien Road, just before the Banff Centre, for this moderate three-hour hike. **Wednesday 10 a.m. & Sunday 10 a.m.**

D. HISTORIC WALKING TOUR: Discover how Banff came to be through tales of rugged and often eccentric characters from the past. This leisurely 1½ hour walking tour of the Banff townsite leaves from the front of the Park Museum, beside the Bow River bridge. Presented in ENGLISH. Friday 2 p.m. in FRENCH: Tuesday 10 a.m.

**At the Cave**

E. EXOTIC AQUATICS: Tropical fish in the mountains? You'll find these and other strange and wonderful wetland creatures when you take this afternoon stroll around the Cave and Basin Marsh. Wear sturdy shoes and bring binoculars for this 1½ hour event. Meet at the entrance to the Cave & Basin Centre. **Tuesday & Thursday 2 p.m.**

F. CAVE & BASIN NATURE WALK: You may spot a b wildflowers in bloom. This easy two-hour stroll begins at the front entrance to the Cave & Basin Centre. **Tuesday & Wednesday 10 a.m.**

STEAM, SCHEMES, AND NATIONAL DREAMS: It all began in 1883 when three young railway workers discovered the Cave & Basin hot springs. Little did they know that their discovery would lead to the beginning of Canada's national park system. At the Cave & Basin Theatre, the entertaining half-hour film "Steam, Schemes, and National Dreams" tells the tale of steaming springs, schemes to get rich, and of the national dreams the springs inspired. Daily at noon

CAVE & BASIN DISCOVERY: On any afternoon at the Cave & Basin you may happen upon a piano playin', story tellin' character from the past, or find out why rare and exotic creatures live in the marsh. Check the board at the Cave & Basin entrance for a schedule of daily discovery events.

**At the Lake**

G. LAKE AGNES WALK: This three-hour walk to a small hanging valley perched high above Lake Louise offers spectacular views of the area. Meet at the large sign with the yellow bighorn ram's head symbol near the shore of Lake Louise. Bring a lunch if you like, or buy one at the teahouse. **Monday, Wednesday, & Saturday 10 a.m.**

H. LAKE LOUISE LAKESHORE STROLL: Who was Louise? Are there fish in the lake? Spend two hours along the lakeshore learning about Lake Louise's colourful human history and natural features. Meet at the large sign with the yellow bighorn ram's head symbol near the shore of Lake Louise. **Monday, Tuesday, & Wednesday 2 p.m.**

I. PLAIN OF SIX GLACIERS HIKE: Exert yourself a bit on a 13-kilometre (8 mile) round trip hike through inspiring scenery of mountains and glaciers. Meet at the large sign with the yellow bighorn ram's head symbol near the shore of Lake Louise. **Monday, Tuesday, Wednesday & Saturday 2 p.m.**

J. CONSOLATION LAKE WALK: Come on an easy, three-hour walk through a shady mountain forest to a sparkling glacier-fed lake. You may even see a marmot or a porcupine! Meet at the sign in the Moraine Lake parking lot. **Tuesday, Friday, & Sunday 10 a.m.**

**Lake Louise (June 25 - Sept. 2)**

- **Monday**
  - 10 a.m. Lake Agnes Walk (G)
  - 2 p.m. Lake Louise Lakeshore Stroll (H)
  - 7 p.m. Lake Louise Campground Theatre
- **Tuesday**
  - 9 a.m. Plain of Six Glaciers Hike (I)
  - 10 a.m. Consolation Lake Walk (J)
  - 10 a.m. Lake Louise Campground Theatre
- **Wednesday**
  - 10 a.m. Lake Agnes Walk (G)
  - 2 p.m. Lake Louise Lakeshore Stroll (H)
  - 7 p.m. Lake Louise Campground Theatre
- **Thursday**
  - 9 a.m. Plain of Six Glaciers Hike (I)
  - 10 a.m. Consolation Lake Walk (J)
  - 7 p.m. Lake Louise Campground Theatre
- **Friday**
  - 10 a.m. Consolation Lake Walk (J)
  - 7 p.m. Lake Louise Lakeshore Stroll (H)
  - 7 p.m. Lake Louise Campground Theatre
- **Saturday**
  - 10 a.m. Lake Agnes Walk (G)
  - 7 p.m. Lake Louise Lakeshore Stroll (H)
  - 7 p.m. Lake Louise Campground Theatre
- **Sunday**
  - 9 a.m. Plain of Six Glaciers Hike (I)
  - 10 a.m. Consolation Lake Walk (J)
  - 7 p.m. Lake Louise Campground Theatre

**Icefields Parkway (June 25 - Sept. 2)**

- **Monday**
  - 8 p.m. Rampart Creek Campground Firecircle
- **Wednesday**
  - 8 p.m. Waterfowl Campground Theatre
- **Thursday**
  - 11 a.m. Parker Ridge Walk (K)
  - 8 p.m. Rampart Creek Campground Firecircle
- **Friday**
  - 8 p.m. Waterfowl Campground Theatre
  - 8 p.m. Waterfowl Campground Theatre
  - 8 p.m. Waterfowl Campground Theatre
- **Saturday**
  - 11 a.m. Parker Ridge Walk (K)
  - 8 p.m. Waterfowl Campground Theatre

**On the Parkway**

K. PARKER RIDGE WALK: Panoramic views of the Saskatchewan Glacier and Columbia Icefield are the highlights of this moderately strenuous two-hour walk above treeline. Meet at the Parker Ridge trailhead, 5 kilometres (3 miles) south of the Jasper park boundary on the Icefields Parkway. Bring a lunch if you like. **Thursday, Saturday, & Sunday 11 a.m.**

Interested in learning more about the park? Talk to a park interpreter. You may find one with a roving exhibit trailer along the Icefields Parkway, at the Great Banff Game trailer in the townsite of Banff, or wandering through the Visitor Centre at Lake Louise, or the Cave and Basin Centre. If you have questions about programs or want further information on the natural and cultural history of Banff National Park, an interpreter can help you. In Banff, the interpretive office is on the lower level of the Information Bureau on Banff Avenue, and the telephone number is 762-3324, ext. 4282. In Lake Louise, call 522-3763, or ask for the interpretive office in the Lake Louise Visitor Centre.

**AUTUMN IN THE ROCKIES:**

Walk through the famous golden larches of Banff National Park with a park interpreter. This 2-3 hour (2.4 km-one-way) hike to Larch Valley offers stunning views of Moraine Lake and the Ten Peaks along the way. Wear sturdy shoes, bring warm clothing and water, and meet at the start of the Moraine Lake Lakeshore Trail. **September: Saturdays 8, 15, 22, 29 at 10 a.m.**

Sundays: September 9, 16, 23, 30 at 10 a.m.
No Place for a Lady?

“One day I was introduced to Dr. Cora Best, the lady mountaineer of the moment. She had just come back from climbing Mt. Victoria. I ventured to say I too hoped one day to do this climb. Cora gave me her snootiest look and said, ‘Young woman, that is an ambition that will take many years to fulfill.’”

Georgia Engelhard-Cromwell
from Lake Louise, A Diamond in the Wilderness

As it turned out, Georgia Engelhard climbed Mt. Victoria the very next year, in 1927, and even “under very bad conditions” this particular young woman “found no difficulty.” Eventually she would admire the view from the top of this mountain on 13 separate occasions. Georgia was slim and wiry, and full of boundless energy — even her Swiss mountain guides had trouble keeping up with her. In 1929, Georgia climbed nine peaks in nine days!

“In those early days there were no climbing schools for the novice,” Georgia said. “You learned while climbing — watching the guide’s motions and taking in the few instructions he gave you. Woe betide you if you used your knees while climbing up or your pants bottom when climbing down.”

Georgia Engelhard quickly outgrew the need for a guide. Soon she began showing the rest of the world how it was done. In 1931, she starred in “She Climbs to Conquer,” filmed on the Victoria Glacier. She became a professional photographer as well, and produced a series of how-to photos of such mountaineering techniques as hammering in an ice piton, crossing a snow bridge, and rapelling into a crevasse.

She had come a long way since being snubbed by Dr. Cora Best — all the way to the top of a good number of peaks, 32 of them first ascents. Leaving Lake Louise one summer to return to her home in America, she wanted a last look at “her” mountains:

“The day after my last climb, the day of departure, I got up at 4 a.m. A silver moon flooded the calm, mirror-like lake with silver, and silver were the Victoria Glaciers beyond. With my easy, loping mountaineer’s stride, less than two hours brought me to the summit of Mt. St. Piran, 915 metres (3000 ft.) above Lake Louise. The lake and valley were still in deep shadow, but the surrounding peaks, all I had climbed, were bathed in golden, rosy light. I was seized by an indescribable ecstasy, filled with the joy of conquest. Yet, at the same time, I felt how infinitesimal I was. It was an unforgettable experience.”

Beauty on the Peaks

Picture a high, treeless meadow rimmed by rocky peaks. About 60 percent of Banff National Park looks like this. From afar, the alpine landscape appears barren, but if you look closely you can see that the alpine meadows are a carpet of wildflowers. Even on seemingly bare rock you will find small plants clustered in hollows and tucked into crevices. How can these delicate-looking beauties survive the harsh life of the alpine? Well, they’re tougher than they look.

While tall stems are fine for greenhouse roses, alpine plants prefer to hug the ground to avoid the wind. The ever-present mountain wind robs plants of warmth and water — precious commodities at high elevations. In order to retain even more heat and moisture, the leaves, stems, and even the petals of alpine plants may be hairy or leathery. To further protect themselves from the elements, these plants tend to grow densely, huddling close to one another.

Summers are short in the land above the trees — sometimes only a few weeks long! It can take alpine plants a decade or more of slow growth to store up enough energy to produce a single flower. These flowers capture our attention as we hike in the alpine. However, the blooms are far from purely decorative. Some, like those of the mountain avens, are saucer-shaped to collect the sun’s rays. Other plants, such as the purple saxifrage, have pigments which screen out damaging ultra-violet light. Many, like the moss campion and the alpine forget-me-not, give off a sweet fragrance to attract pollinators. All of them brighten the stark alpine landscape with their brief and unexpected beauty.

Sunshine Meadows, Bow Summit, and Parker Ridge are good places to see alpine flowers in July and August. Please leave all flowers as you find them for others to enjoy.
Park Crossword Puzzle

DOWN:
1. There are lots of _______ trails in the park.
2. You can find out how our _______ were built at the Lake Louise Visitor Centre.
6. In Banff National Park, black bears eat mostly _______ during the early summer.
7. The red squirrel makes its home in a pile of cone scales called a _______.
9. The _______ is a member of the deer family you might meet in Banff.

ACROSS:
3. A common tree around Banff is the lodgepole _______.
4. The _______ is closely related to the coyote.
5. If you want to find interpretive programs or exhibits in the park, look for these _______: ＄ ＄
6. The white mountain _______ is an alpine plant with saucer-shaped flowers.
7. The _______ is a black and white bird with a long tail.
8. It is against the law to feed the _______ in national parks.
10. Male Rocky Mountain bighorn _______ grow large curled horns.

Rodent Riddles
1. What sounds like a miniature chainsaw, and, in the late summer and fall, drops cones on the ground and hangs mushrooms up in the trees to dry?
2. What lives in colonies, builds amazing tunnels under the ground, spends three quarters of the year asleep, and should not be fed — no matter how much it begs?
3. What looks like a chipmunk, but isn’t?

Rodent Riddle Answers
1. The white-footed ground squirrel has a long nose, the golden-mantled ground squirrel is larger, and its stripes give its back and ears extra all the way to the tip. The prairie vole, the least chipmunk, is very small and has a striped tail. We do have a golden-mantled ground squirrel.
2. The Columbia ground squirrel.
3. The white-footed ground squirrel.

Bankhead, The Twenty Year Town, written by Ben Gadd and produced jointly by the Coal Association of Canada and the Canadian Parks Service, is now on sale at local bookstores. The book tells the story of the old coal mining town of Bankhead, near the present day town of Banff, as it was from its beginnings in 1902 to its demise in 1922.
A Last Stronghold of Wilderness

Harvey Locke

Banff National Park is one of North America's great protected wilderness areas. Within its boundaries is enough wilderness to maintain populations of wildlife that are disappearing elsewhere. There is room in this park to see the forces of nature at work, unaffected by the hand of man; room to make contact with nature on her own terms. In Banff National Park it is possible to be three days on foot in any direction from anywhere civilized. One of my most powerful memories is the profound sense of isolation I felt camping near the headwaters of the Clearwater River deep in the heart of the park a few years ago. The Rocky Mountain ecosystem functions as it always has and man is a visitor who does not remain.

Banff's wilderness is no accident. It is a function of policies which have kept a significant amount of the park in a wild state. That is a major achievement in a country like Canada whose citizens were reared on the myth of a limitless supply of land to exploit. The reality is that here, as in the rest of the world, wilderness is rapidly disappearing. National parks are one place where civilization's progress yields to other values. Current Canadian national park policy, if kept intact, will ensure that there will always be wilderness here.

Many countries herald their architectural masterpieces or their achievements in the liberal arts as great contributions to the world. It takes a very civilized society to appreciate the value of leaving something absolutely untouched as a contribution to the world. Here at home we must also support programs to protect endangered wildlife and reintroduce species. Parks and protected areas play an important role by ensuring that wildlife habitat is left in a natural condition. No habitat, no wildlife - it's really that simple. In fact, about 70% of the world's extinctions are caused directly by the activities of people.

To turn this around, World Wildlife Fund mounts campaigns to save well-known endangered species such as the panda in China and the black rhino in Africa. But we have nearly 200 species listed by the Committee on the Status of Endangered Wildlife in Canada. Therefore, here at home we must also support programs to protect endangered wildlife and reintroduce species.
Tune in to Banff Cablevision (Channel 10) any hour of the day for the latest park and weather information. Videos on Banff’s natural and cultural history are also shown from 5 p.m. to 7 p.m. daily.

WE’RE DOING IT, TOO!

Ravens do it when they line their nests with the fur shed by bighorn sheep in the spring. Mice and voles do it when they nibble away at the cast-off antlers of elk and deer. Red squirrels do it when they make their homes in their own garbage — the big piles of pine cone scales (called “middens”) that accumulate as they peel them off to get at the seeds. And now we’re doing it, too.

Recycling! You don’t have to throw those empty cans and bottles into the garbage — take them to the Banff Bottle Depot in the industrial compound. And, you don’t have to throw your newspapers away once you’ve read them, now that we have a paper drop-off trailer in the parking lot behind the Credit Union in the town of Banff. Remember the other three Rs of recycling: reduce, re-use, and recover. It’s something we all can do — both on vacation and at home.
Campgrounds in Banff National Park

Tunnel Mountain:
- Trailer Court: May 11 - Oct. 1
- Village II: Open year-round
- Village I: May 11 - Oct. 1

Two Jack Main: May 17 - May 21
- June 15 - Sept. 4
- June 29 - Sept. 4

Lakeside: May 1 - Oct. 1
- (may be closed for rehabilitation)

Johnston Canyon: May 18 - Sept. 17

Castle Meadows (group tenting): May 18 - Sept. 17

Castle Mountain: June 22 - Sept. 4

Protection Mountain: June 22 - Sept. 4

Lake Louise: Open year-round

Mosquito Creek: June 15 - Sept. 10
- (No winter camping charge)

Waterfowl Lake: June 15 - Sept. 10

Rampart Creek: June 22 - Sept. 4

Cirrus Mountain: June 22 - Sept. 4
- (No charge from Sept. 5 to snowfall.)

Sites in these campgrounds are allocated on a first-come, first served basis. Demand is heavy through July and August. Johnston Canyon and Tunnel Mountain are often full by noon, other campgrounds by 4 p.m., so it's best to arrive early. Camping is allowed only in designated campsites.

Recreational vehicle sewage disposal stations:
- Government industrial compound - Banff townsite
- Tunnel Mountain campground - all three sections
- Two Jack campground - main campground
- Johnston Canyon campground
- Protection Mountain campground
- Lake Louise campground - trailer section
- Waterfowl Lake campground

Directory of Park Facilities & Services

Information Centres:
- Banff Information Bureau: 762-4256
- June 2 - Sept. 3: 8 a.m. - 10 p.m.
- The rest of the year: 10 a.m. - 6 p.m.
- Lake Louise Visitor Centre: 522-3833
- June 18 - Sept. 3: 8 a.m. - 10 p.m.
- The rest of the year: 10 a.m. - 6 p.m.

Park Warden Offices:
- Banff: 762-4506
- Lake Louise: 522-3866
- Saskatchewan River Crossing: No phone

Park Interpretive Offices:
- Banff: 762-3324
- Lake Louise: 522-3763

Upper Hot Pool, Mountain Avenue:
- June 4 - Oct. 8: Daily 8:30 a.m. - 11 p.m.
- The rest of the year: Monday - Thursday 8:30 a.m. - 11 p.m.
- Friday - Sunday 8:30 a.m. - 11 p.m.

Cave & Basin Centennial Centre:
- June 14 - Sept. 3: Daily 10 a.m. - 8 p.m.
- The rest of the year: 10 a.m. - 5 p.m.

Cave & Basin Swimming Pool:
- June 14 - Sept. 3 (Closed in winter): 10 a.m. - 8 p.m.

Park Museum (No charge):
- Banff Avenue next to the bridge: 8 a.m. - 6 p.m.

Banff National Park Administration Building:
- South end of Banff Avenue: 8 a.m. - Noon

EMERGENCIES:
- R.C.M. Police, Banff: 762-2226
- R.C.M. Police, Lake Louise: 522-3811
- Mineral Springs Hospital, Wolf Street: 762-2222
- Ambulance: 762-4333
- Fire Dept., Banff: 762-2000
- Fire Dept., Lake Louise: 522-2000
- Veterinarian, Canmore: 678-4425
- Alberta Motor Association (A.M.A.): 762-2711
Mary Vaux

Although Mary Vaux was a devout American Quaker from Philadelphia who considered art and mountaineering to be frivolous activities, she nevertheless made significant contributions to both fields.

In July of the year in which this photograph was taken she became the first woman to climb a major peak in Canada. Simply getting to the top was not the purpose of her arduous climb, though. Mary and her brothers were more interested in noting the natural features of the mountains, and photographing them. The pictures were to serve as an accurate record which might make some modest contribution to the advancement of science. But they do much more than that. They invite us into the heart of our mountain landscape, bringing us close to the pulse and spirit of wilderness — a spirit as alive today as it was when Mary composed her photos almost a century ago.

Tropical Birds “Vacation” in Banff

What do Banff’s Johnston Canyon and the rainforests of Costa Rica have in common? They are both home to the black swift.

During the winter months swifts live in the dense forests of Central America. Come spring they fly north to the Rocky Mountains and many parts of British Columbia.

Black swifts nest in the crevices of cliffs and canyons, often near waterfalls. The rocky walls of Johnston Canyon are one of two sites in Alberta where they are known to nest. Both parents help feed the solitary youngster for about a month until it learns to fly and catch its own insects. By September, the family is preparing for its long flight south.

While we consider many migratory birds such as the swift to be “ours” because they nest here, we should really think of them as tropical birds that fly north to breed. Luckily for the swifts, their breeding area is protected within Banff National Park. That luck does not extend to their winter home.

Besides the hazards of migration itself — storms, man-made obstacles, and great distances — winters in the south are especially tough on these birds. The wintering grounds of most of our migratory birds are crowded and competitive. They are also shrinking as more and more forests are cleared for agriculture. It is estimated that over 30,000 hectares (74,000 acres) of tropical forest are cleared worldwide each day — just over 20 hectares (50 acres) per minute.

Our concern for preserving wildlife habitat must consider an animal’s entire range. For migratory birds (and that’s 80% of the birds in North America) it will mean a guaranteed home year-round. For the black swifts, it will mean a continued return to Banff National Park.

Cadets at Work

In the past two years army cadets have taken “time off” from their Leadership and Challenge course in Banff National Park to work on the new Anthracite-Hoodoo Loop Trail and the Johnson Lake Trail. Both trails begin and end at Johnson Lake, 8 km (5 miles) north-east of Banff, off the Minnewanka Lake road.

BANFF LEADS THE WAY IN WASTEWATER TREATMENT

The town of Banff has a brand new Wastewater Treatment Plant. The former plant, built in 1970, had become unable to meet growing peak sewage flows and tougher environmental guidelines. Through state of the art technology, tested in Europe but new to North America, the new $11.2 million facility will serve us well into the 21st century. Effluent from the plant, once it has been separated from the sludge, is disinfected through an ultra-violet process before being released into the Bow River. The sludge, after undergoing biological decomposition, ends up as fertilizer.
Banff & Jasper

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Above and beyond

the call of beauty.

Ride Banff's longest gondola to Sunshine Village and Meadows – the most spectacular alpine meadows in the Rockies – and experience why our gondola offers you more.

More breathtaking viewpoints
• scenic 3 mile gondola ride to village
• free chairlift ride to lookout at 7,700 ft

More hiking, exploring, and things to enjoy
• short walks or long hikes – 12 miles of trails
• explore unique alpine lakes and meadows
• a variety of dining choices, or stay overnight right on mountain at the Sunshine Inn

More guided information
• Visitor Centre offers an environmentally conscious Interpretive Program, or follow self-guiding trail markers
• Daily Interpretive Events at 11 am, 1 pm and 4 pm (call 762-6560 for more information)

More convenient transportation
• daily busing from Banff's hotels to Sunshine. For schedule call Pacific Western Transportation at 762-4558

Ride the Sunshine Gondola
Information: 762-6543 Hotel reservations: 762-6555 Visitor Centre: 762-6560

Only 15 minutes west from Banff. Take the TransCanada Highway to the Sunshine Exit, 8 km (5 mi) west of Banff [or 45 km (27 mi) east of Lake Louise] & follow the road to the Sunshine Village Gondola. Open late June – early Sept.

This is a paid advertisement.
Tours from Jasper

**Discover Jasper**
Visit Maligne Canyon and ride the Jasper Tramway to the top of Whistlers Mountain. 3 hrs
Adult $19.50  Child $9.75

**Maligne Lake**
Motorcoach and 1 1/2 hr cruise includes a stop at world famous Spirit Island. 5 hrs
Adult $39.00  Child $19.50

**Athabasca Raft Tour**
Follow the route of the pioneer fur traders on this guided raft trip. 3 hrs
Adult $25.00  Child $12.50

Tours from Lake Louise

**Columbia Icefield**
See SnoCoach Tours. Adult $41.00  Child $20.50

**Emerald Lake**
Travel across the Great Divide and visit Takakkaw Falls, the Natural Bridge and Spiral Tunnels. 3 1/2 hrs
Adult $28.00  Child $14.00

**Lake Minnewanka Cruise**
Motorcoach and boat cruise to Devil’s gap and the hoodoos. 3 hrs
Adult $28.00  Child $14.00

**Bow River Raft Tour**
Spectacular views on this guided raft trip on the Bow River. Short walk required; bring warm clothing. 3 hrs
Adult $30.00  Child $15.00

**Sulphur Mountain Gondola**
Photograph a “sea of mountains” from 770m above Banff townsite. 3 hrs
Adult $13.00  Child $6.50

**Mountain Lakes & Canyons**
Moraine Lake, Lake Louise, Takakkaw Falls, Emerald Lake, Spiral Tunnel and the Natural Bridge. 9 hrs
Adult $39.00  Child $19.50

**Columbia Icefield**
Located at the boundary of Banff and Jasper National Parks, the Columbia Icefield is a 325 square kilometre expanse of ice and snow. In places the glacier is 320 metres deep, formed from snow that fell 400 years ago.

**SnoCoach Tours**
Travel in safety and comfort in Brewster’s custom design SnoCoach onto the glacier surface. Learn the cold facts from our qualified driver-guides.

Tours are weather dependant, Departures daily from May 1 to Oct 15, 1990.
Note: Credit cards not accepted at the icefield. Weather conditions can change quickly, be sure to dress appropriately.
Visitors of Banff National Park will remember it as being the best of Canadian Landscapes. Allow us to add to those memories – come and share a western experience.

WILDERNESS COOKOUTS – Breakfast Rides, Steak Frys and "The Explorer" day rides.

HORSEBACK RIDING from Martin Stables and the Banff Springs Hotel Corrals.

CARRIAGE RIDES – scenic tours around the Banff townsite, Banff Springs Hotel and the Cave and Basin.

FOR FURTHER INFORMATION AND RESERVATIONS PLEASE DROP BY OUR OFFICE AT THE TRAIL RIDER STORE, 132 BANFF AVE. OR CALL 762-4551

Office for: Warner Guiding and Outfitting Ltd.
P.O. BOX 2280, BANFF, ALBERTA T0L 0C0
FAX: 403-762-8130