



Parks      Parcs  
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# BACKCOUNTRY USER'S GUIDE

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## JASPER NATIONAL PARK

### BEFORE GOING INTO THE BACKCOUNTRY

- Read this guide carefully.**
- Plan your trip.**
- Check at an information centre or park warden office for current information on trail conditions, special hazards, weather, permit and registration procedures.**
- Obtain a topographical map of the area you plan to visit.**
- Be aware of park regulations that affect you.**

## PLANNING TO CAMP IN THE BACKCOUNTRY?

To prevent overcrowding and avoid undue damage to the environment, a PARK USE PERMIT is required if you plan to stay overnight in the backcountry of Jasper National Park.

Before you set out on your trip, you may obtain this mandatory permit free of charge at the trail office in Jasper townsite or at the Icefields centre. During the winter months when the Icefields centre is closed and the hours of the townsite information centre trail office are shortened, permits are also available at park warden headquarters and Sunwapta warden station.

All park use permits must be picked up in person. This gives you the opportunity to discuss your plans with knowledgeable people. Recent reports on conditions should also be available for most routes. You may pick up your permit within 24 hours of your actual departure time.

You are not required to return your permit upon completion of your trip. However, if you have time, please tell the trail office attendants your impression of conditions you found and the experience you have had. Such information will assist future travellers.

## ARE YOU UNDERTAKING A RISK ACTIVITY?

If you plan to participate in an activity which, in your opinion, involves an element of risk, you may register your trip in person at the same locations where park use permits are available. Some activities for which voluntary registration is recommended are: climbing, canoeing, kayaking, skiing outside regularly tracked routes, and any activity on the glaciers or the area surrounding Columbia Icefield.

Your portion of the registration notice must be returned by the time and date recorded. Deposit boxes are located outside the townsite information centre and the Icefields centre (Sunwapta warden station in winter) for after-office-hour returns.

The information recorded on the registration should give as accurate a description of your route as you can provide. Any side trips planned should be included. This will aid rescue operations in case you encounter difficulties or have an accident and are overdue on your return.

## BE AWARE

To help preserve the special features of our national parks for all to enjoy now and in the future, follow these regulations and environmentally sound use practices:

**Litter:** As well as being ugly, litter is dangerous. A piece of broken glass or a shiny bit of tin foil could magnify the sun's rays enough to start a forest fire. Animals may be injured by scavenging in garbage left lying around. They may also learn to associate edible trash with backcountry visitors, resulting in possible danger to travellers who follow later. "Pack In-Pack Out" litter bags are provided at all locations where park use permits are available, so that you may bring your empty containers (cans, bottles, foil packages, etc.) out of the backcountry at the end of your trip.

**Wildlife:** For the safety of both animals and visitors, it is unlawful to entice, touch or feed wildlife. Feeding wildlife may adversely affect their health.

All large animals can be dangerous, especially those with young. Even the smaller mammals such as squirrels and chipmunks can inflict a hurtful bite. Please take time to consult the "YOU ARE IN BEAR COUNTRY" folder for more information.

**Natural objects:** Rocks, fossils, horns, antlers, plants, wild flowers, nests and all other natural or historical objects in a national park should be left as you found them in their natural setting for others to discover and enjoy. Violating this regulation may lead to prosecution.

**Pets** may provoke confrontation with wildlife and affect your safety. Because pets must be restrained on a leash at all times while in a national park, they may be happier if left at home.

**Camping:** To lessen man's impact on backcountry natural resources, camping is restricted to designated primitive campsites on maintained trails. Please camp only at those sites indicated on your park use permit.

**Note:** Regulations differ for designated special areas. Travel in these areas should be discussed with trail office attendants.

**Groups:** To reduce crowding, the size of groups travelling in the backcountry is limited to 10 persons maximum.

**Reservations:** Park use permits may be reserved for up to 35% of each trail's capacity. The remaining 65% are issued on a first come, first served basis. Applications will only be considered within 21 days

of the actual departure date. You may apply for a reservation:

- in person at the trail office in Jasper townsite (year-round) or the Icefields centre (June to mid-October)
- by writing to the Superintendent, Jasper National Park, Box 10, Jasper, Alberta TOE 1E0.
- by phoning the trail office at (403) 852-4401 after 1 p.m. (mountain daylight time in summer; mountain standard time in winter).

You may pick up your reserved permit within 24 hours of departure time, but no later than 10 a.m. on the day of departure. Permits will be cancelled at that time, and vacancies will revert to the first come, first served basis.

**Campfires** should be considered a luxury and are permitted only where metal fireboxes are provided by the park. Keep your fire small. Use only deadfall available in the area, since live branches give a lot of smoke but very little heat. Ensure that the fire is tended at all times and that it is completely smothered before you move on. Gas-burning stoves are cleaner and more efficient for cooking.

**Note:** Due to the lack of deadfall available for firewood, there are no fireboxes at the campsites above treeline on the Skyline Trail. You will probably want to pack a gas-burning stove.

**Shortcutting** trails causes damage to the soil and plants that not only ruins the scenic quality, but may render the area susceptible to erosion. Please take the extra steps and stay on the trail.

**Pollutants:** To keep our mountain water pure for yourself and others, dispose of soapy water or other pollutants at least 60 m away from lakes and streams. Use biodegradable soap only.

**Human waste:** To dispose of human waste where there are no facilities provided, select a spot away from trails, campsites and water sources. Dig a shallow hole with a stick or the heel of your boot. Fill the hole with rocks afterward.

**Food left in vehicles** may encourage damage by bears. Try to plan meals prior to your trip to avoid leaving excess food in your vehicle.

**Closures:** From time to time, because of extreme fire hazard, avalanche hazard or other circumstances, it may be necessary to close an area with little notice. This is not done casually and is necessary to protect both you and the park. Please obey all closed signs.

**Footwear:** This is your most important piece of equipment. Boots should be sturdy, waterproof, comfortable and broken in before you begin your trip.

**Clothing:** In high country, it can snow anytime. Wool clothing is preferable because it retains its insulating qualities when wet, whereas cotton and nylon do not. Wet clothes can result in body heat loss and increase your chances of hypothermia. Always take rain gear and be prepared for freezing temperatures, even in mid-summer.

Wear several layers of clothes rather than just one heavy sweater and jacket. Using the layer system, you take off or put on clothing according to the weather conditions. Cotton trousers, such as jeans, are not recommended.

**Equipment:** A warm, but light sleeping bag is important. A tent shelters you from rain and mosquitoes, and a fly is desirable. Gas stoves are convenient, particularly when conditions are wet, and necessary in areas where wood fires are not permitted. Be sure to carry a first aid kit, even on short day trips.

In hazardous areas during winter, carry emergency equipment such as avalanche probes, small shovels, avalanche beacons and spare clothing.

**Nutrition:** To prevent energy depletion, you must eat enough food while engaged in heavy exercise. Without adequate food, you could become dizzy, weak and nauseated. A good dinner the night before your trip and a hearty breakfast in the morning are a must. Missing a meal or fasting may lead to energy exhaustion which in turn can contribute to hypothermia and frostbite.

Frequently eating small snacks which are high in carbohydrates, such as "trail mix" of nuts, raisins and chocolate, will allow you to keep up your pace and to maintain a high level of energy. Eating one large meal on the trail should be avoided because this will tend to slow the body down.

Preventing dehydration is an important factor in backcountry safety, therefore drink plenty of fluids. Normal daily intake should be about two litres, even if the weather is cold. In cold weather, carry a thermos with a good hot drink in it (no alcohol). Do not eat snow. Snow lowers your body temperature, and vital body energy is lost in warming both you and the melting snow in your stomach.

## CLIMBERS, MOUNTAINEERS AND SKIERS

- Never climb or travel alone. Travelling on glaciers and snow is dangerous. Hiking on glaciers should be avoided by all but parties guided by an experienced mountaineer.
- Highly specialized equipment and knowledge are necessary for climbing, glacier travel and backcountry skiing. If you plan to take part in any of these activities, you are advised to discuss your plans with a park warden.
- All of these activities may pose some risk or hazard. For your own safety, voluntary registration is recommended.
- Be mentally and physically prepared for your trip. Be aware of your own limitations. Remember, your party is only as strong as its weakest member.

## HORSE TRAVEL

Horses are permitted on many trails in the park. Some primitive backcountry campsites have been designed specifically with horse-pack parties in mind. If you plan to take your horse(s) with you on overnight trips, you must purchase a grazing permit at either the trail office or the Icefields centre. Grazing permits cost \$1 plus 8¢ per horse per night. Grazing may be limited in some areas.

Please observe the following rules:

- Take no more horses than required.
- Riderless horses should be well controlled.
- Pellet-type horse feed should be used.

- Refrain from tying horses to shrubs or trees for extended periods. Picket lines should be away from campsites and moved frequently.
- Do not construct corrals or drift fences.
- When breaking camp, clean up and scatter horse droppings.
- Report any lost or dead horses to the park warden service.
- **Remember** you share the trail with foot traffic, so give hikers consideration.

## CANOES AND KAYAKS

Approved life preservers must be worn at all times when travelling any park waters. Wet suits are recommended for travelling a river route or on Maligne Lake. These glacier-fed waters always remain cold, and exposure for even a short time may result in hypothermia.

Campsites for overnight trips are located at the south end of Maligne Lake and along the Athabasca River. Ask information centre or trail office attendants for more information.

Because both of these activities involve some risk, voluntary registrations are recommended.

## BOATING

Boats with engines are allowed only on Pyramid and Medicine Lakes. Those with electric motors are permitted on all waters except where signs prohibit boating. Remember that most waters in the park are glacier-fed and remain cold throughout the year. If your boat tips, try to ride it right or climb on top, rather than trying to swim to shore.

## SNOWMOBILES

There are a number of designated routes for snowmobile travel in Jasper National Park. Each machine must be insured and licensed in accordance with provincial regulations. You must also have a park licence to operate your snowmobile. These are available free of charge at the townsite information centre and park warden headquarters, upon presentation of valid insurance and registration certificates.

## FOR YOUR PERSONAL SAFETY

- Never go out alone.
- Always leave word where you are going and when you plan to return. If you have no one to leave word with, you may take out a voluntary registration.
- Check the weather forecast. Dress according to the conditions, but be prepared for any change.
- Make sure all your equipment is in good order and carry simple repair items.
- Pack a first aid kit, waterproof matches, and spare clothing such as extra socks, gloves, T-shirt and sweater.
- Never over-exert yourself. The chances of hypothermia or accidents are greatest when the body is tired and cold.
- Know your fitness level and keep within your limits.
- Plan ahead so that you reach your campsite in lots of time to set up camp before dark.
- Get the latest information on snow conditions and avalanche hazards from an information attendant or park warden. Learn to recognize avalanche areas and take appropriate precautions.

- When travelling in spring, travel during early morning hours when the avalanche danger is not so great. This applies to travel on the Columbia Icefield during the summer months as well.
- Beware of the hazards of snow blindness; wear good sunglasses.
- If you are travelling in remote backcountry, be prepared to cross unbridged creeks and rivers. Water levels can fluctuate widely, seasonally and daily, due to snow melting at higher elevations.

## BEWARE OF THESE DANGERS

### Hypothermia

Hypothermia describes a physical condition where the body loses more heat than it produces. As the condition advances, the temperature of the body's inner core is lowered.

Hypothermia can be caused by: becoming wet and chilled, being stranded without food or warm clothing, injury, exhaustion or a combination of these circumstances. In the mountains, dampness, cool weather and wind chill can bring on this condition even in summer months. Always be prepared for cold or wet weather.

### Symptoms:

- ... violent shivering
- ... loss of co-ordination
- ... impaired judgement
- ... body cold to the touch
- ... pulse slow and shallow

...The body loses the ability to rewarm itself after prolonged exposure to cold, and the victim may lapse into a stupor, followed by cardiac or respiratory failure.

#### **Treatment:**

- ... Prevent heat loss.
- ... To warm the victim, find some sort of shelter, build a fire, change wet clothing and keep victim insulated from the ground. If a sleeping bag is available, place the victim inside, along with another person.
- ... Warm fluids and sweets may be necessary in extreme cases.

#### **Prevention:**

- ... Avoid becoming exhausted, hungry, wet and chilled.
- ... Use layered clothing, which allows you to adjust to temperature conditions, to keep warm and to avoid undue perspiration.
- ... Carry a supply of high calorie foods (and sugars) to give the body fast energy.
- ... Never go into the mountains without a warm hat. An unprotected head may lose as much as half the body's heat at 2°C.
- ... Do not allow a tired or chilled member of your party to travel alone, even if he feels he is all right.
- ... Always pace your party's progress to the slowest traveller.

**Remember** hypothermia is much easier to prevent than to treat.

#### **Frostbite:**

As your body gets cold, the blood supply to the extremities decreases, and they may freeze. Fingers, toes, chin, cheeks, nose and ears are common places for frostbite.

#### **Symptoms:**

- ... white, waxy-looking flesh
- ... lack of feeling in the affected area
- ... if severe, may be some blistering
- ... firm to touch on the surface
- ... Always be on the look-out for visible signs of frostbite on your companions' faces.

#### **Treatment:**

- ... Treat superficial frostbite by rewarming with body heat (hand, armpit or bare stomach).
- ... Do not rub affected area, especially with snow; this may cause extensive cell damage.
- ... Change to dry clothes if wet.
- ... Keep the main body core dry.
- ... Evacuate the victim as soon as possible.
- ... If frostbite is severe, do not rewarm until the victim reaches medical aid.
- ... Remove anything that may constrict circulation, such as gloves, rings or boots.

#### **AVALANCHES**

Large and small avalanches can have tremendous force and are a serious threat to winter travellers. Knowledge can help you avoid being caught by a snow avalanche and will help you survive if you are buried.

Snow avalanches are complex natural phenomena. Experts do not fully understand all the causes. No one can predict avalanche conditions with certainty. The general guidelines that follow will help a thinking observer to develop judgement about the presence and degree of avalanche danger.

**Play it safe.** If in doubt, stay out of avalanche hazard areas.

**Beware of snowslopes:**

- during and after any snowfall greater than 12.5 cm
- during and after winds of speeds greater than 24 km/h
- after any great temperature change, up or down
- during hot sun on south-facing slopes in spring

**Danger areas to avoid:**

- gullies, even a small slide can be fatal
- open slopes of 20° or more
- convex slopes
- lee slopes

**Danger signs while on the move:**

- fracture lines spreading from your steps or any fracture line
- whoomph sounds from beneath you
- snow collapsing into your tracks
- snowballs or sloughs falling away from your tracks

**Route selection:**

- Follow ridges and valley bottoms.

- Windward side of ridge is usually safer.
- Avoid cornices or lee slopes.
- Tree-covered slopes are usually safer than open ones.

**If you must cross a suspicious slope:**

- Take hands out of wrist loops on poles.
- Untie any waist band on your pack.
- Put on hat, gloves and jacket.
- Put on avalanche cord or beacon. Your chances of survival, should you be buried, are much greater if using these safety items.
- One person cross at a time, and watch the person constantly as he crosses the slope.
- If you must ascend or descend an avalanche slope, go straight up or down; do not traverse.

**If you are the survivor:**

- Mark the place where you last saw the victim. Search for him or articles belonging to him directly downslope below the last seen point. If he is not on the surface, probe the snow with a ski pole or stick.
- You are the victim's best hope for survival. Do not desert him and go for help, unless help is only a few minutes away. Remember, you must consider not only the time required for you to get help, but the time required for help to return. After one hour, the buried victim has only 50% chance of surviving.

**First Aid:**

- Treat for suffocation and shock.
- Check for broken limbs.



## IF YOU GET LOST OR INJURED

- Do not panic.
- Make your position known to searchers. It is in your best interest to stay in one place.
- Make use of natural shelters such as hollows under logs or large rocks and snow hollows around tree trunks.
- Make yourself comfortable and try to refresh yourself.
- Keep your hat on; up to 50% of your body heat can be lost through your head.

## IF YOU HAVE AN ACCIDENT

Have another member of your party, another traveller or any park personnel in the area contact the closest park office.

## WHERE TO GET INFORMATION

Trail office	}	(403) 852-4401
Townsite information centre		
Park warden headquarters		
Administration building		
After-hours information		

For further information, write to:

Superintendent  
Jasper National Park  
Box 10  
Jasper, Alberta  
Canada  
T0E 1E0

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