Avalanche Terrain Ratings for backcountry touring in the Mountain National Parks

Fourth edition

Avalanches are part of life in the mountains, an integral piece of the winter cycle. Anytime snow and steep slopes are combined, avalanche potential results. If you wish to travel through backcountry terrain that is exposed to avalanches, you must accept that you’re taking a risk. You need to understand these risks before taking them, and the information included here will help give you a better sense of the type of trip you are planning.

The avalanche forecast provides ratings of avalanche danger that are based on the snowpack conditions, which change regularly with the weather – from day to day, or even hour to hour. Terrain however, doesn’t change much. The angle and shape of the ground, or the number of established avalanche paths won’t vary from day to day. By using the Avalanche Terrain Exposure Scale (ATES), you can begin to measure your skills, experience and risk tolerance against the landscapes through which you choose to travel.

Do I still need to read the avalanche bulletin every day? Absolutely - terrain is only part of the picture. When the avalanche danger is “High”, you should select conservative terrain. Alternatively, when the danger is “Low”, this might be the time to consider that next level of terrain you have been contemplating. The two must be used together for understanding the big picture of how to manage your risk in the backcountry. Daily avalanche information is available at Park Visitor Centres, or at www.parksmountainsafety.ca

When should I use this system? These ratings are intended to supplement pre-trip planning material. This means reading guidebooks, studying maps and photos, talking to friends, checking weather and avalanche conditions, and referring to the ATES ratings while planning the trip. All of these resources together will give you a better sense of the route you are choosing.

How do I use the scale? The list of rated trips represents the most common destinations in the Mountain National Parks. Don’t use this scale alone you need additional material to learn about the trip you are proposing. The following guidebooks are recommended:

1. Summits & Icefields, Columbia Mountains – by Chic Scott & Mark Klassen
2. Summits & Icefields, Canadian Rockies – by Chic Scott & Mark Klassen
3. Ski Trails in the Canadian Rockies – by Chic Scott
4. Ski Touring in Rogers Pass – by J.P. Kors, John Kelly & Eric Dafoe

These publications are widely available at local mountain specialty stores. For further information on specific trips visit any Parks Canada information centre in the Mountain National Parks – or check with a local professional guide service.

How much experience do I need for these trips?

Simple (Class 1) terrain requires common sense, proper equipment, first aid skills, and the discipline to respect avalanche warnings. Simple terrain is usually low avalanche risk, ideal for novices gaining backcountry experience. These trips may not be entirely free from avalanche hazards, and on days when the avalanche danger is rated “High” or “Extreme”, you may want to re-think any backcountry travel that has exposure to avalanches – stick to groomed x-country trails, or within the boundaries of a ski resort.

Challenging (Class 2) terrain requires skills to recognize and avoid avalanche prone terrain – big slopes exist on these trips. You must also know how to understand avalanche forecasts, perform self rescue, basic first aid, and be confident in your route finding skills. You should take an Avalanche Skill Training Level 1 course before traveling in this type of terrain. If you are unsure of your own, or your group’s ability to navigate through avalanche terrain - consider hiring a professional, ACMG certified guide.

Complex (Class 3) terrain demands a strong group with years of critical decision making experience in avalanche terrain. There can be no safe options on these trips, forcing exposure to big slopes. A recommended minimum is that someone in your group should have taken an Avalanche Skills Training Level 2 course, and has several years of backcountry experience. Be prepared! Check the avalanche forecast regularly, and ensure everyone in your group is up for the task and aware of the risk. This is serious country - not a place to consider unless you’re confident in the skills of your group. If you are uncertain - consider hiring a professional, ACMG certified guide.

Disclaimer

There are inherent risks in backcountry travel, and most of the routes described here will at times be unsafe due to potential snow avalanches. The Parks Canada Agency has done its best to provide accurate information and to describe the terrain characteristics typical of each general region. However, it is up to the users of this information to learn the necessary skills for safe backcountry travel, access additional trip planning materials, and to exercise caution while traveling through the backcountry in any national park.

Users of this information do so entirely at their own risk, and the Parks Canada Agency disclaims any liability for injury, injury resulting in death or damage to anyone undertaking a trip into any of the regions described. This information is no substitute for experience and good judgment.

Avalanche Terrain Exposure Scale (ATES)

<table>
<thead>
<tr>
<th>Description</th>
<th>Class</th>
<th>Terrain Criteria</th>
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</thead>
<tbody>
<tr>
<td>Simple</td>
<td>1</td>
<td>Exposure to low angle or primarily forested terrain. Some forest openings may involve the runout zones of infrequent avalanches. Many options to reduce or eliminate exposure. No glacier travel.</td>
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<tr>
<td>Challenging</td>
<td>2</td>
<td>Exposure to well-defined avalanche paths, starting zones or terrain traps; options exist to reduce or eliminate exposure with careful route-finding. Glacier travel is straightforward but crevasse hazards may exist.</td>
</tr>
<tr>
<td>Complex</td>
<td>3</td>
<td>Exposure to multiple overlapping avalanche paths or large expanses of steep, open terrain; multiple avalanche starting zones and terrain traps below; minimal options to reduce exposure. Complicated glacier travel with extensive crevasse bands or icefalls.</td>
</tr>
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</table>
SIMPLE – CLASS 1

**Banff National Park**
Baker Creek
Baker Creek powerline
Bath Creek - 7 km from Hwy 1
Bow Riverside loop
Brewster Creek to Sundance Lodge
Bryant Creek
Cascade Fire Road
Cave and Basin trails
Fairview loop
Glacier Lake
Goat Creek
Great Divide Trail
Healy Creek – Sundance to SSV road
Johnston Creek to Waputs
Lake Louise shoreline trail
Merlin Valley from Skoki
Minnewanka lakeshore
Morain Lake road trackset
Mosquito Creek to MOS
Natural Bridge from Skoki
Pharaoh Creek
Pipestone trails
Redefear Creek
Skoki via Boulder/Deception Passes
Skoki via Pipestone River
Spray River Trail
Telemark trail
Tower Lake
Tramline trail
Two Lakes from Hwy 1
Upper Lake Louise north trails

**Jasper National Park**
Astoria River to Tonquin/WH hut
Athabasca Falls
Athabasca Falls/Meeting of the Waters
Bald Hills Lookout trail – to hitching rail
Bears Lake fire road
Edith Cavell road – to hostel
Lorraine and Mona Lakes trail (to Evelyn Creek campground)
Marjorie and Caledonia Lake
Mina Lake loop
Moab Lake
Moose Lake
Patissades Lookout
Patricia Lake loop
Pochobit Creek
Pyramid-Bench loop
Shangri-La to Snowbird only
Stutter Creek (valley flats only)
Summit Lakes/Jacques Lake
Sunwapta Falls/Athabasca River

**Kootenay National Park**
Challenger Peak Campground
Emerald Lake designated north trails
Field to Emerald Lake nordic trail
Ice river fire road
Kickin Horse trail
Lake O'Hara circuit (avoid the north shoreline)
Lake O'Hara Road to EP hut
Morning Glory Lakes
Pass Lake circuit
Sherbrooke Lake (to lake only)
Wapta Falls
Yoho Valley road trackset

**Glacier National Park**
Beaver River
Birgers Pass ski hill (forest cuts behind hotel)
Wheeler Hut approach and vicinity

**Mt. Revelstoke National Park**
2km & 3km loop trails
Inspiration Woods
Lindmark trail to Parkway intersection
Meadows in the Sky Parkway
Summit Trail to 8 Mile Crossing

**Waterton Lakes National Park**
Akamna Pass
Akamna Pass to Forum Lake
Bear's Hump trail
Colter Lake fire road
Cameron Lake trail to lake only
Chandel Lake
Dipper
Wahshone

**Challenging – Class 2**

**Banff National Park**
Boom Lake
Bow hut to Balfour hut via Nic/Olive col
Bow Summit area
Castleward Mt.
Cirque Peak
Crowfoot Pass
Diallairit Glacier
Elk Lake Summit
Forty Mile Creek
Fossil Mountain loop
Gibbons Pass
Haldik Lake via Shadow Lake
Healy Creek – SSV to Healy Pass
Hidden bowl region
Hilda Ridge
Katherine/Helen Lake circuit
Lake Louise resort backcountry accessed from ski area
Mt. Gordon (YNP)
Mt. Olive
Mt. Rhonda South
Mt. Thompson
Observation subpeaks
Paradise Valley
Parker Ridge
Peyto hut to Bow hut
Saskatchewan glacier
Skoki Mountain loop
Sunshine to Healy Creek
Sunshine Village backcountry accessed from ski area
West Nile

**Jasper National Park**
Amethyst Lakes/Moat Lake
Athabasca Glacier to first icefall
Bald Hills area
Fraser Glacier
Fryatt Creek
Little Shovel Pass
Maccabari Pass to Tonquin
Maligne Pass
Marmot Basin backcountry accessed from ski area
Shangri-La past Snowbird
Skyline Trail
The Brazeau Icefield
Whistlers Creek
Wilcox Pass

**Yoho National Park**
Amiskwi Fire Road
Kwetinoki Pass
McArthur Pass
Odanay Plateau
Opabin Plateau
Ottertail Valley Fire Road
Peyto Glacier approach
Palm of Six Glaciers trail
Pambrun Pass
Pavillon Peak
Pulpit Peak area
Pumpkin Traverse
Surprise Pass
White Pyramid

**Jasper National Park**
Athabasca Glacier past first icefall
Balsam Lake to Mt. Revelstoke Summit
Lindmark Trail above Parkway Intersection
Summit Trail above 8 Mile Crossing

**Waterton Lakes National Park**
Akamna Pass to Wall Lake
Berta Lake
Forum Ridge
Lakeshore
Summit Knob to Boundary Creek
Summit Knob to Cameron Lake
Summit Lake

**Yoho National Park**
Emerald Pass
Emerald Peak/Slide Path
Isolated Covid
Little Yoho Valley approach
Mt. Cathedral
Mt. Collie
Mt. Delius
Mt. Field
Mt. McArthur
Opabin Lake/kenchima circuit
Popes Peak
President Pass
Schafer Basin
Sheeber/Lomas route
Sherbrooke Lake Wapta access
Yoho Traverse

**Glacier National Park**
3 Pass Traverse
Buller Glacier exit to Hwy 1
Bonneet Icefield
Bow Hut approach
Castle Mt. – to summit
Cirrus Mountain
Crowfoot Mt.
Dolomite Peak circuit
Drummond Icefield
Hector Lake/Wapta access
Mike Wynn circuit
Mt. Baker
Mt. Balfour
Mt. Coleman
Mt. Fairview
Mt. Hector
Mt. Jimmy Junior
Mt. Jimmy Simpson
Mt. Mistaya
Mt. Niblock via Divide Creek
Mt. Patterson
Mt. Rhonda North
Mt. Wilson
Mystic Pass
Observation Peak (summit)
Oyster Lake
Packers Pass
Pat Sheehan Traverse
Peyto Glacier approach
Palm of Six Glaciers trail
Pambrun Pass
Pavillon Peak
Pulpit Peak area
Pumpkin Traverse
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**Glacier National Park**
3 Pass Traverse
BB12 Bowl
Asulkan/Tree/Tripe Tree
Asulkan Pass
Asulkan Valley Practice Slopes
Avalanche Crest bowl/sidetrip
Blaire Pass
Bonneet Glacier
Brun's Pass
Coggar Mountain
Domie Glacier
Flat Creek slidetrips
Fortinude
Glace Glacier
Grizzly/Little Sifton Traverse
Iceline Trail Practice Slopes
Iceline Trail new access
Lily Glacier
Lizards Tail
Lookout Col
McGill Bowl – McGill Pass
Mt. Rogers
Mt. Swany
Mt. Tupper Traverse
NPC Gulles
Perley Rock
Sapphire Col
Smart Ridge
Stops of Paradise – Youngs Pk
Terminal Peak
The Cone
The Mousse Trap
The Thrashers
Ursus Majus
Ursus Trees
Vaux Moraines/Sr Donald/Uto Col
Vent Shaft slidetrips
Video Peak
Youths Pk via Iceline Trail

**Mt. Revelstoke National Park**
Hamilton Creek Upper Meadows
Clachmacusian Creek
Clachmacusian Creek east fork
Saint Syr Creek
Coulsier Creek
Woolsey Glacier – Coulsier Peak
Clachmacusian Glacier-Inverness Peaks
Mount Klotz above treeline
West Woolsey Creek
Mamuer Channel

**Waterton Lakes National Park**
Akamna Lake Chutes (The Fingers)
Alison-Carthey
Lineman Lake
Rowe Bowl/Peake (CV 13)
Rowe Lake

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