

Avalanche Terrain Ratings for backcountry touring in the Mountain National Parks



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.

AVALANCHE TERRAIN RATINGS AND AVALANCHE FORECASTS MUST BE USED TOGETHER FOR EVALUATING HAZARDS AND MANAGING PERSONAL RISK IN THE BACKCOUNTRY.

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Parcs



Canada

Do I still need to read to 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'll 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 & Mark Ri
- 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 avalanche self rescue, basic first aid, and be confident in your routefinding 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)

Description	Class	Terrain Criteria
Simple	1	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.
Challenging	2	Exposure to well-defined avalanche paths, starting zones or terrain traps; options exist to reduce or eliminate exposure with careful routefinding. Glacier travel is straightforward but crevasse hazards may exist.
Complex	3	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.

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 Brvant Creek Cascade Fire Road Cave and Basin trails Fairview loop Glacier Lake Goat Creek Great Divide Trail Healv Creek - Sundance to SSV road Johnston Creek to Inkpots Lake Louise shoreline trail Merlin Vallev from Skoki Minnewanka lakeshore Morain Lake road trackset Mosquito Creek to MO5 Natural Bridge from Skoki Pharoah Creek Pipestone trails Redearth Creek Skoki via Boulder/Deception Passes Skoki via Pipestone River Sprav River Trail Sulphur Mountain backside trail Sulphur Mountain trail under gondola Sundance Pass Telemark trail Tower Lake Tramline trail Twin Lakes from Hwv 1 Upper Lake Louise nordic trails

Jasper National Park

Astoria River to Tonguin/WH hut Athabasca Falls loops Athabasca Falls/Meeting of the Waters Bald Hills Lookout trail - to hitching rail Cabin Lake fire road Edith Cavell road - to hostel Lorraine and Mona Lakes trail (to Evelvn Creek camparound) Marjorie and Caledonia Lake Mina Lake loop Moab Lake Moose Lake trail Palissades Lookout Patricia Lake loop Poboktan Creek Pvramid-Bench loop Shangri-La to Snowbowl only Stutfield Creek (valley flats only) Summit Lakes/Jacques Lake Sunwapta Falls/Athabasca River

Valley of the Five Lakes/Wabasso Lakes Whistlers campground loop

Kootenay National Park

Chickadee Valley (valley bottom only) Dog Lake Dollv Varden East Kootenav Hector Gorge Simpson River (to KNP boundary) West Kootenav

Yoho National Park

Chancellor Peak Campground Emerald Lake designated nordic trails Field to Emerald Lake nordic trail Ice River fire road Kicking Horse trail Lake O'Hara circuit (avoid the north shorline) Lake O'Hara road to EP hut Morning Glory Lakes Ross Lake circuit Sherbrooke Lake (to lake only) Wapta Falls Yoho Valley road trackset

Glacier National Park

Beaver River Rogers Pass ski hill (forest cuts behind hotel) Wheeler Hut approach and vicinity

Mt. Revelstoke National Park

2km & 5km loop trails Inspiration Woods Lindmark trail to Parkway intersection Meadows in the Sky Parkway Summit Trail to 8 Mile Crossing

Waterton Lakes National Park

Akamina Pass Akamina Pass to Forum Lake Bear's Hump trail Cameron Lake trail to lake only Crandel Lake Dipper Wishbone

CHALLENGING – CLASS 2

Banff National Park

Boom Lake Bow hut to Balfour hut via Nic/Olive col Bow Summit area Castlegard Mt. **Cirque Peak** Crowfoot Pass **Diablaret Glacier** Elk Lake Summit Forty Mile Creek Fossil Mountain loop Gibbon Pass Haiduk 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 Healv 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 Frvatt Creek Little Shovel Pass Maccarib Pass to Tonguin Maligne Pass Marmot Basin backcountry accessed from ski area Shangri-La past Snowbowl Skyline Trail The Brazeau Icefield Whistlers Creek Wilcox Pass

Yoho National Park

Amiskwi Fire Road **Kiwetinok Pass** McArthur Pass Odaray Plateau Opabin Plateau

Ottertail Vallev Fire Road **Glacier National Park**

Avalanche Crest - to treeline **Cheops Glades** Flat Creek valley trail Grizzly Shoulder Hermit Meadows McGill Shoulder Sifton Col The Hourglass

Mt. Revelstoke National Park

Balsam Lake to Eva & Miller Lakes Balsam Lake to Mt Revelstoke Summit Lindmark Trail above Parkway Intersection Summit Trail above 8 Mile Crossing Woolsey Creek Road

Waterton Lakes National Park

Akamina Pass to Wall Lake Bertha Lake Forum Ridge Lakeshore Summit Knob to Boundary Creek Summit Knob to Cameron Lake Summit Lake

COMPLEX – CLASS 3

Banff National Park

Balfour to Scott Duncan Huts Ball Pass Bath Glacier exit to Hwv 1 Bonnet 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. Mistava Mt. Niblock via Divide Creek Mt. Patterson Mt. Rhonda North Mt. Wilson Mystic Pass **Observation Peak (summit)** Oyster Lake Packers Pass Pat Sheehan Traverse

Pevto Glacier approach Plain of Six Glaciers trail Ptarmigan Peak Pulpit Peak area Pumpkin Traverse Surprise Pass White Pyramid

Athabasca Glacier past first icefall Diadem Creek Mt. Columbia Mt. Kitchener North Twin Snow Dome South Twin Stutfield Peak

Kootenay National Park

Chickadee Valley - above valley bottom Stanley Glacier Valley Storm Mt. Tokkum Creek

Yoho National Park

Emerald Pass Emerald Peak/Slide Path Isolated Col Little Yoho Vallev approach Mt. Cathedral Mt. Collie Mt. Des Poilus Mt. Field Mt. McArthur Opabin/ Wenkchemna circuit Popes Peak President Pass Schaefer Basin Scheisser/Lomas route Sherbrook Lake Wapta access Yoho Traverse

Glacier National Park

3 Pass Traverse 8812 Bowl Asulkan Hut/Tree Triangle Asulkan Pass Asulkan Valley Practice Slopes Avalanche Crest bowl/slidepath Balu Pass **Bonney Glacier Bruins Pass** Cougar Valley Dome Glacier Flat Creek slidepaths Fortitude **Glacier Circle** Grizzly/Little Sifton Traverse

Illecillewaet Practice Slopes Illecillewaet Neve access Lily Glacier Lizards Tail Lookout Col McGill Bowl - McGill Pass Mt. Rogers Mt. Swanzy Mt. Tupper Traverse NRC Gullies Perlev Rock Sapphire Col Smart Ridge Steps of Paradise – Youngs Pk Terminal Peak The Cone The Mouse Trap The Ravens Ursus Maior Ursus Trees Vaux Moraines/Sir Donald/Uto Col Vent Shaft slopes Video Peak Youngs Pk via Illecillewaet

Mt. Revelstoke National Park

Hamilton Creek Upper Meadows Clachnacudain Creek Clachnacudain Creek east fork Saint Syr Creek Coursier Creek Woolsev Glacier- Coursier Peak Clachnacudain Glacier-Inverness Peaks Mount Klotz above treeline West Woolsev Creek Maunder Creek

Waterton Lakes National Park

Akamina Lake Chutes (The Fingers) Alderson-Carthew Lineham Lake Rowe Bowl/Peak (CV 13) Rowe Lake

Jasper National Park