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 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.parksmountainssafety.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
4. Ski Touring in Rogers Pass – by J.P. Kors, John Kelly & Eric Dafoe

These publications are widely available at local mountain specialty centres, or at www.parkscanada.gc.ca. In addition, there are numerous publications available to learn the necessary skills for safe backcountry travel, access information and locate 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:

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<thead>
<tr>
<th>Description</th>
<th>Class</th>
<th>Terrain Criteria</th>
</tr>
</thead>
<tbody>
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<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>
</tr>
<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>
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<td>3</td>
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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)

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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 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.

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**Banff National Park**
Baker Creek
Banff Creek powerline
Bath Creek – 7 km from Hwy 1
Bowl Riverside loop
Brewster Creek to Sunnyside Lodge
Bryant Creek
Cascade Fire Road
Cave and Basin trails
Fairview loop
Glacier Lake
Goat Creek
Great Divide Trail
Healy Creek – Sunwapta Falls to SS/5 road
Johnston Creek to Wapta Falls
Lake Louise shoreline trail
Merlin Valley from Skoki
Minnewanka lakeshore
Morain Lake road trackset
Mosquito Creek to Mossy Lake
Natural Bridge from Skoki
Pharaoh Creek
Pipestone trails
Redearth Creek
Skoki via Boulder/Deception Passes
Spray River Trail
Sulphur Mountain mountain backside trail
Sulphur Mountain trail under gondola
Sundance Pass
Telermark trail
Tower Lake
Tramline trail
Twin Lakes from Hwy 1
Upper Lake Louise Nordic trails

**Jasper National Park**
Astoria River to Tonquin/Whut
Athabasca Falls loops
Athabasca Falls/Meadows of the Wapta Falls
Bad Hills Loop
Bear’s Hump trail
Edith Cavelle road – to hostel
Lorraine and Mona Lakes trail (to Evelyn Creek campingground)
Marjorie and Caledonia Lake
Mina Lake loop
Mobe Lake
Moose Lake trail
Patsaidas Lookout
Patricia Lake loop
Pothos Creek
Pyramid-Bench loop
Shangi-Li to Snowowl only
Skiff Creek (valley flats only)
Summit Lakes/Jacques Lake
Sunwapta Falls/Athabasca River

**Kootenay National Park**
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