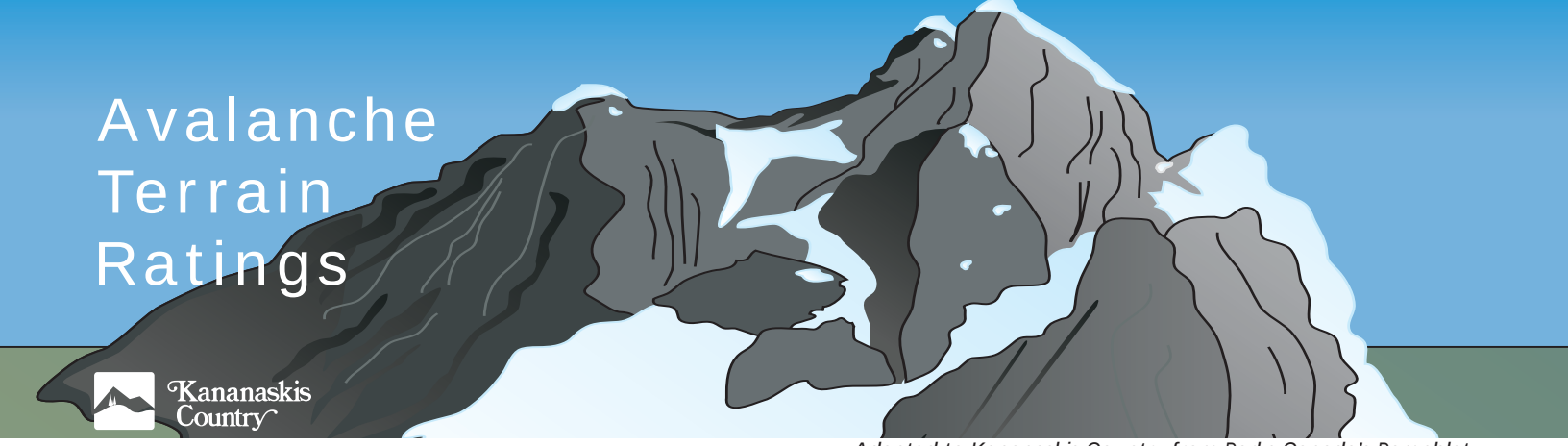
Avalanche Terrain Ratings



Kananaskis Country

Adapted to Kananaskis Country from Parks Canada's Pamphlet:
"Avalanche Terrain Ratings for the Mountain National Parks", ISBN# 0-662-38737-6

Traditional models for rating avalanche danger are based on the stability of snow, which changes 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.*

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 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 Kananaskis Country. Don't use this scale alone — you'll need additional material to learn about the trip you are proposing.

Do I still need to pay attention to the daily avalanche bulletins?
Absolutely — terrain is only part of the picture. When the avalanche conditions are rated "poor", you should select very conservative terrain. Alternatively, when the avalanche conditions are rated "good", this might be the time to consider that next level of terrain you've been contemplating. The two must be used together for understanding the big picture of how to manage your risk in the backcountry. Daily bulletins are available at Visitor Information Centres, and on the Web:
www.cd.gov.ab.ca/parks/kananaskis or
www.avalanche.ca

Important Notice

Snowpack structure and stability information is determined from field analysis specific to snow study plot sites. Snowpack structure and stability will vary as you travel throughout mountainous terrain. It is, therefore, the responsibility of the backcountry traveller to be self-sufficient in being able to perform self-rescue should you, the traveller, be involved in an accident. Also, backcountry travellers are responsible for obtaining their own information concerning current weather conditions, snow, winds, snowfall, etc. and are responsible for educating themselves to the best possible awareness level.

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 *Backcountry Avalanche Bulletin* is rated "high or extreme", you may want to re-think any backcountry travel that has exposure to avalanches — stick to groomed cross-country trails.

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 the *Backcountry Avalanche Bulletin*, perform avalanche self rescue, basic first aid, and be confident in your routefinding skills. You should take a *Recreational Avalanche Course* (RAC) prior to travelling in this type of terrain. If you are unsure of your own, or your group's ability to navigate through avalanche terrain then 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. As a minimum, you or someone in your group mmust have taken an *Advanced Recreational Avalanche Course* (ARAC) and have several years of backcountry experience. Be prepared! Check the *Backcountry Avalanche Bulletin* 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're uncertain then consider hiring a professional, ACMG certified guide.

For Further Information

Peter Lougheed Park Visitor Centre:	(403) 591-6322
Barrier Information Visitor Centre:	(403) 673-3985
Canadian Avalanche Association:	www.avalanche.ca
Emergency 24/7:	(403) 591-7767

To report on conditions and avalanche observations, or incidents you may observe in Kananaskis Country please contact: Avalanche.Safety@gov.ab.ca

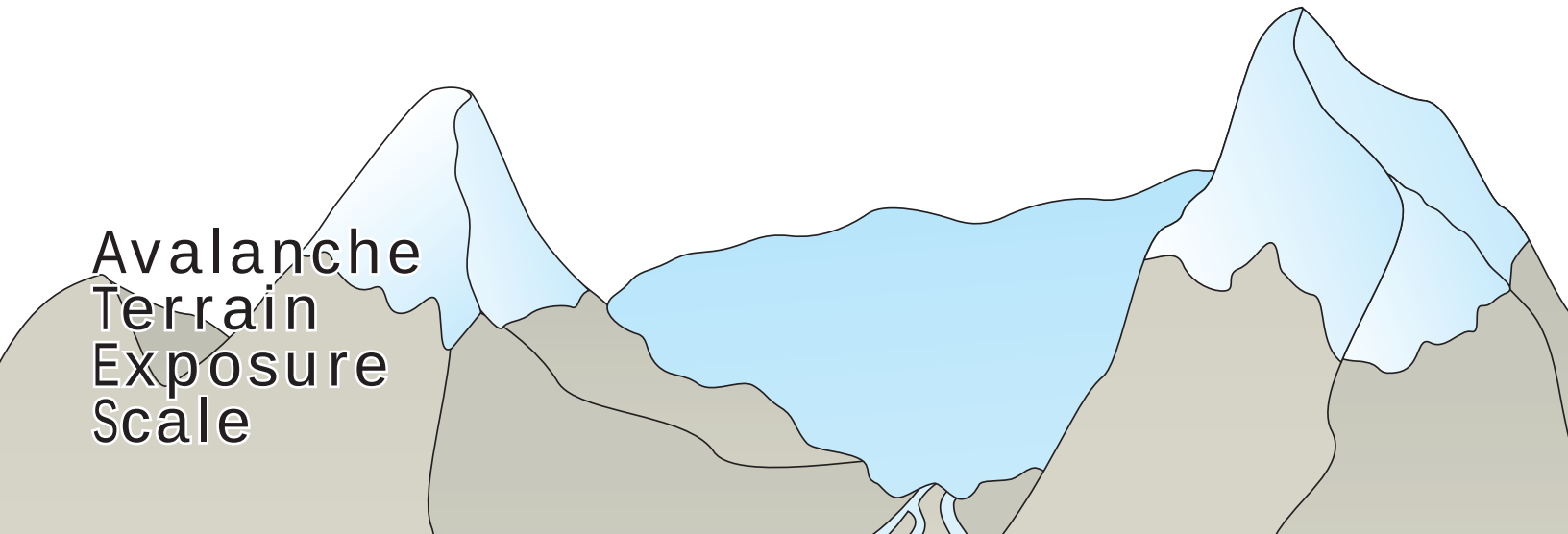
About this scale:

Any given piece of mountain terrain may have elements that will fit into multiple classes. Applying a terrain exposure rating involves considering all of the variables described above, with some default priorities.

Terrain that qualifies under an ***italicized bold*** descriptor automatically defaults into that or a higher terrain class. Non-italicized descriptors carry less weight and will not trigger a default, but must be considered in combination with the other factors.

Adapted from Parks Canada's Document: "Technical Model (V. 1-04)"

	Simple — Class 1	Challenging — Class 2	Complex — Class 3
Slope angle	Angles generally < 30°	Mostly low angle, isolated slopes >35°	***Variable with large >35°***
Slope shape	Uniform	Some convexities	Convoluted
Forest density	Primarily treed with some forest openings	Mixed trees and open terrain	Large expanses of ope Isolated tree bands
Terrain traps	Minimal, some creek slopes or cutbanks	Some depressions, gullies and/or overhead avalanche terrain	***Many depressions, gullies, cliffs, hidde slopes above gullie cornices***
Avalanche frequency *(events:years)*	1:30 ≥ size 2	1:1 for < size 2 1:3 for ≥ size 2	1:1 < size 3 ***1:1 ≥ size 3***
Start zone density	Limited open terrain	Some open terrain. Isolated avalanche paths leading to valley bottom	Large expanses of ope terrain. Multiple avalanche paths leadi to valley bottom
Runout zone characteristics	Solitary, well defined areas, smooth transitions, spread deposits	Abrupt transitions or depressions with deep deposits	Multiple converging runout zones, confine deposition area, steep tracks overhead
Interaction with avalanche paths	Runout zones only	Single path or paths with separation	***Numerous and overlapping paths***
Route options	Numerous, terrain allows multiple choices	A selection of choices of varying exposure, options to avoid avalanche paths	***Limited chances to reduce exposure, avoidance not possi***
Exposure time	None, or limited exposure crossing runouts only	***Isolated exposure to start zones and tracks***	***Frequent exposure start zones and trac***
Glaciation	None	***Generally smooth with isolated bands of crevasses***	***Broken or steep sections of crevasse icefalls or serac exposure***



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