



Be avalanche alert

AVALANCHE TERRAIN RATINGS

FIORDLAND NATIONAL PARK



Department of Conservation
Te Papa Atawhai

How does ATES apply in Fiordland National Park?

Fiordland National Park covers 1.3 million hectares of remote mountainous terrain and avalanche conditions can vary throughout.

The majority of Fiordland tracks meander along valleys that are clear of winter snow. However, due to the surrounding steep-sided mountains and wet snow, avalanches have a great impact on valley floors, usually travelling at speed and leaving little chance to avoid them. Avalanche run-out zones in valley floors are usually self-evident, with clearings and little vegetation in these zones.

There is avalanche threat on several of Fiordland's tracks and all of the Great Walks in the area (Milford, Routeburn and Kepler Tracks.)

Milford Track

The Milford Track is mainly complex avalanche terrain. Avalanches are frequent. There are over 57 avalanche paths that could bring avalanche debris to the valley floor. Some of these have the potential to cross the Milford Track - in the Clinton and Arthur valleys, avalanche start zones cannot be seen from the track. Once in motion there is little to no chance of avoidance. The Mackinnon Pass requires walkers to traverse avalanche start zones. Though smaller in size these avalanches have the potential to carry walkers over bluffs and steep terrain.

Routeburn Track

The Routeburn Track has a lot of challenging and complex avalanche terrain. Avalanches are frequent. There are over 32 avalanche paths. Some of these may bring avalanche debris to the valley floor and have the potential to cross the Routeburn Track - not all the start zones can be seen from the track.

Harris Saddle can be extremely dangerous because the track traverses through avalanche start zones, which can result in human-triggered avalanches. Run-out zones in the Harris Saddle area generally end in the lake or over a bluff.

Kepler Track

The Kepler Track has a lot of challenging and complex avalanche terrain. Avalanches are frequent. There are nine avalanche paths above Luxmore Hut and right through the alpine sections to Hanging Valley Shelter that have the potential to cross the Kepler Track - not all their start zones can be seen from the track. Trampers spend most of their time in the start zones, so human triggers are possible. Walking the alpine section of the track can be slow due to deep snow and the very exposed, potentially fatal, steep icy slopes.

Snow storms during winter can deliver over 1.5 metres of wind-affected snow.

Luxmore Hut has become a favourite destination during the winter months and has no known avalanche danger.

A list of the ATES ratings for popular backcountry tracks in Fiordland is available on the DOC website www.doc.govt.nz/avalanche-fiordland and from the Fiordland National Park Visitor Centre.

Be avalanche aware!

If you are going into places avalanches could occur, make sure you:

- Have checked the ATES class and the BAA for the avalanche rating for the area where you plan to go.
- Have the skills for the ATES class you are going into.
- Have checked what avalanche advisory and alert information is available from the DOC visitor centre nearest the area you are going into.
- Take an avalanche transceiver, a snow shovel and a probe. Know how to use these tools!

Risk statement

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 Department of Conservation has done its best to provide accurate information describing the terrain characteristics typical of each general region, based on its current knowledge. However, it is up to you to use this information to make your own risk-management decisions and learn the necessary skills for safe backcountry travel, to access additional trip-planning materials, and to exercise caution while travelling in backcountry areas. This information is no substitute for experience and good judgement.

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Avalanches are part of life in the mountains. They can occur in any season, but are more common in winter and spring. Anytime that snow and steep slopes are combined there is potential for an avalanche.

Is it worth the risk?

If you travel through backcountry terrain exposed to avalanches, you must accept that you are taking a risk. You need to understand these risks before setting out.

What is the Avalanche Terrain Exposure Scale system (ATES)?

The traditional model for rating avalanche danger in New Zealand – the Backcountry Avalanche Advisory – is based on the stability of snow. The advisory may be updated on a daily basis because snow stability changes regularly through weather changes and storms.

Terrain does not change with the weather. The angle and shape of the ground or the number of established avalanche paths do not vary. By using the ATES (described in more detail below), you can begin to measure your skills, experience and risk tolerance against the terrain you plan to travel in.

Do I still need to read the Backcountry Avalanche Advisory (BAA)?

Yes – reading both ATES and BAA helps you to decide if your trip is ‘worth the risk’.

When the avalanche advisory is rated ‘moderate’ or above, you should select very conservative terrain. Alternatively, when the avalanche advisory is rated ‘low’, it might be appropriate to consider that next level of terrain you have been contemplating.

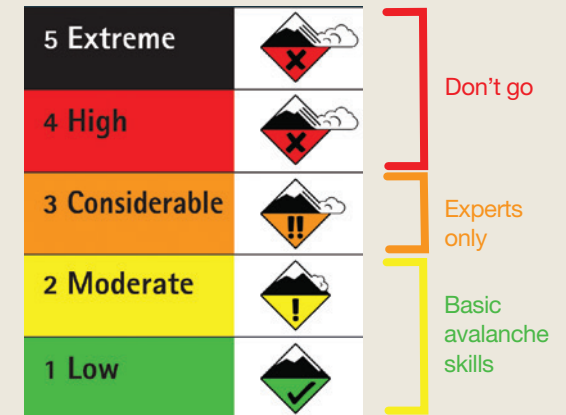
The two scales must be used together to appropriately manage your risk in the backcountry.

When should I use this system?

These ratings are intended as a supplement to your pre-trip planning material. When planning your trip, read the guidebook, study maps and photos, talk to friends, check weather and avalanche conditions, and refer to the ATES ratings. This combination will give you a better sense of the route you are choosing.

BAA – Backcountry Avalanche Advisory

The Backcountry Avalanche Advisory is provided by the Mountain Safety Council, and is available at www.avalanche.net.nz and at DOC visitor centres.



ATES – Avalanche Terrain Exposure Scale

Description	Class	Terrain criteria
Simple	1	Exposure to low-angle or primarily forested terrain. Some forest or bush openings may involve the run-out 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 route finding. 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.

How much experience do I need for the trip I am planning?

Simple terrain

- 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 people gaining backcountry experience.
- These trips may not be entirely free from avalanche hazards. On days when the BAA is rated ‘considerable’ or higher, you may want to re-think any backcountry travel that has exposure to avalanches, e.g. stay within the boundaries of a ski area.
- If there is no advisory, you or someone in your group should have done an avalanche-awareness course.

Challenging terrain

- Challenging (Class 2) terrain requires skills to recognise and avoid avalanche-prone terrain – big slopes are encountered on these trips. You must also know how to understand avalanche advisories, perform avalanche self-rescue, basic first aid, and be confident in your route-finding skills.
- In places where an avalanche advisory exists, you should take an avalanche course before travelling in this type of terrain.

- If there is no advisory, you or someone in your group should have done a four-day avalanche course.
- If you are unsure of your own, or your group’s ability to navigate through avalanche terrain, consider hiring a professional guide, usually an NZMGA-qualified guide.

Complex terrain

- In Complex (Class 3) terrain, you need to be part of a strong group with years of critical decision-making experience in avalanche terrain. There can be no safe options on these trips, where the terrain forces exposure to big slopes.
- A recommended minimum is that you, or someone in your group, should have taken a four-day avalanche course and have several years of backcountry experience. Be prepared! Check the avalanche advisory regularly, and ensure everyone in your group is up for the task and aware of the risk.
- Even if there is no advisory, it is recommended that everyone in the group has done the four-day course. This is serious country – not a place to consider unless you’re confident in the skills of your group.
- If you are uncertain, hiring a professional NZMGA-qualified guide is recommended.

ATES ratings for popular tracks in Fiordland National Park and surrounding areas

Simple

- Dusky Track (excluding the alpine areas)
- West Arm to Percy Saddle to the bush line.
- Hanging Valley Track, Deep Cove.
- Kepler Track (below Luxmore Hut and below Hanging Valley Shelter)
- East Branch Eglinton (Milford Road)
- Boyd Creek to the bushline (Milford Road)
- Geroge Sound Track
- Pass Creek (Hollyford Road)
- Key Summit
- Divide to Lake Howden Hut
- Deadmans Track (not beyond the Routeburn Track)
- The Gantry (not above the Gantry/Hollyford Road)
- Tutoko Valley (not beyond Leader Creek Junction)
- Hollyford / Pyke Track

- Routeburn Falls Hut to Glenorchy road end
- Milford Track (between Glade Wharf and Clinton Hut)
- Milford Track (between Sandfly Point and Giant Gate Falls)

Challenging

- Dusky Track alpine areas (Centre Pass and Lake Roe)
- Borland Road (Borland Lodge to South Arm)
- Percy Pass (above the bushline to Borland Road junction)
- Wilmot Road
- Mavora, Livingstone and Snowdon Ranges
- Lake Marian (Hollyford Road)

Complex

- Takitimu Mountains
- Hunter Mountains
- SW Fiordland

- Kepler Mountains/Jackson Peaks
- Kepler Track (above Luxmore Hut and Hanging Valley Shelter)
- Serpentine Range, Ailsa Mountains and Humboldt Range in Fiordland/Mt Aspiring National Parks area
- Homer Saddle Nature Walk
- Routeburn Track (Lake Howden Hut to Routeburn Falls Hut)
- Mistake Creek, Hut Creek (Milford Road)
- Falls Creek (Milford Road)
- Dore Pass
- Milford Track (between Clinton Hut and Giant Gate Falls)
- Gertrude Valley
- Grave-Talbot Pass Track
- Darran Mountains
- Moraine Creek (Hollyford Road)



Avalanche in Fiordland. Photo: DOC