

How does ATES apply on the Tongariro Alpine Crossing?

A large proportion of the Tongariro National Park below 1700 m is classed as **simple** avalanche terrain; elevations above this altitude are mainly **challenging** or **complex** avalanche terrain. *See insert*

All visitors to the national park should consider carefully the class of avalanche terrain they will be travelling through. Due to the nature of the weather conditions in the park the avalanche hazard can change with very little warning

Avalanche season

Avalanches are the most common during the winter and spring, from July through to October, but can happen for several months either side of that period if there are heavy snowfalls. Snow can fall at any time of the year in the higher parts of the park – therefore avalanches are also possible, but not common, at other times of the year on the glaciers and the steeper higher-altitude terrain in the park.

Tongariro Alpine Crossing

Most of the Tongariro Alpine Crossing is **simple** terrain, however the section of track that crosses over Red Crater between South Crater and Emerald Lakes contains **challenging** and **complex** terrain and the section of track from Blue Lake to Ketetahi contains **challenging** terrain. During periods when there is snow present people should not venture past either the Ketetahi or Mangatepopo car parks without the right avalanche expertise and equipment, or should be accompanied by an experienced guide.

Mount Ruapehu

Some routes on **simple** terrain exist on the northern side up to the Summit Plateau area. Approaches from all other directions and onto the summit of Ruapehu involve travel through **challenging** and **complex** terrain.

Ski areas – Avalanche control work on the ski areas is done to make the ski areas safe while they are open for skiing. Outside of normal open hours and when the ski areas or parts of them are closed avalanche hazards may exist in the closed terrain. During those times you need to take the ATES classification and avalanche danger level into account when travelling in them.

Iwikau Village – During periods of high or extreme avalanche danger outside of ski-area operating hours or when the ski area is closed avalanche hazard can exist at times near some club lodges and on the access routes to others. You should stick to roads, groomed tracks and stay off of any steep slopes during those periods.

Be avalanche aware!

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

- have checked the ATES class for where you want to go and the BAA for the avalanche rating
- have the skills for the ATES class you are going into
- take an avalanche transceiver, a snow shovel and a probe. Know how to use these tools!

Risk statement

ATES and the BAA should be used together for evaluating hazards and managing personal risk in the backcountry.

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.

BAA – Backcountry Avalanche Advisory

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

| | | |
|----------------|---|--------------------------|
| 5 Extreme |  |] Don't go |
| 4 High |  | |
| 3 Considerable |  |] Experts only |
| 2 Moderate |  |] Basic avalanche skills |
| 1 Low |  | |

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be avalanche alert



AVALANCHE TERRAIN RATINGS

TONGARIRO NATIONAL PARK



Department of
Conservation
Te Papa Atawhai

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 as 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 Avalanche Terrain Exposure Scale (ATES), 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 – if a BAA is available you should use it to help 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 should be used together to appropriately manage your risk in the backcountry.

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

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.

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 straight forward, 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. |

Challenging terrain

- 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 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 prior to 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, normally an NZMGA qualified guide.

Complex terrain

- 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 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.
- If there is no advisory, then 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.

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 Backcountry Avalanche Advisory 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.

How ATES applies in Tongariro National Park

Tongariro National Park and surrounding terrain

Simple

Ketetahi Hut
Blue Lake
Emerald Lake
South Crater
Ketetahi car park to Ketetahi Hut
Tama Lake Ridge Track
Iwikau Village
Whakapapa Ski Area
Whakapapa Glacier
Dome Ridge
Turoa Ski Field—except the Jumbo T-Bar
Blyth Hut
The Round the Mountain Track—except
the Wahianoa River
North West Face of Hauhungatahi
Tukino Ski Field

Challenging

Ketetahi Hut to Central Crater
Mt Ngauruhoe
Tama Lakes
Mt Tongariro
Pukekaikiore Summit
Wahianoa River
South West face of
Hauhungatahi
Jumbo T-Bar, Turoa Ski Field
Ski Line Ridge

Complex

Red Crater
The Pinnacles
Ruapehu Summits
Pukekaikiore Cliffs