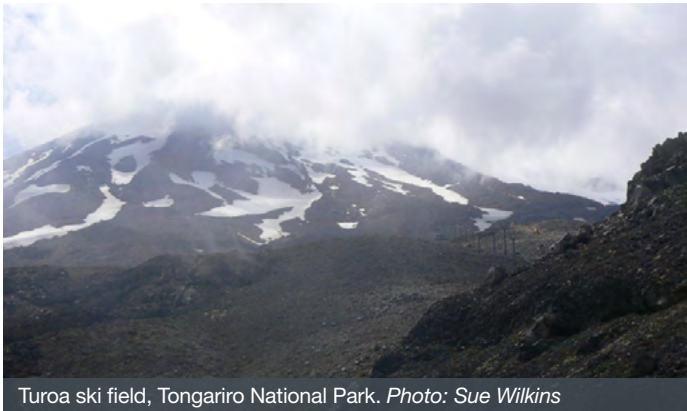


Study site information

10: Alpine Flush

Notes for schools and educators



Turoa ski field, Tongariro National Park. Photo: Sue Wilkins

Key information

An alpine flush in a highly modified alpine environment

This 20 x 20 m plot is a restoration site. Due to its fragile ecosystem it can take only a limited number of visitors.

The alpine flush has formed due to a natural spring permanently saturating soils with nutrient- and oxygen-rich water. It is located within a highly modified (by human activity) location in a mid/high-altitude alpine environment on the edge of Turoa ski field. The field operators try to manage damage caused to the alpine flush during the ski season when snow melts around the natural spring.

There is a stream with alpine aquatic organisms at this site.

For more information on alpine wetlands, see

www.teara.govt.nz/en/alpine-plants/page-2

For an overview of study sites see [Section 4](#), page 7.

More information on sites around the Turoa ski field

www.mtruapehu.com/winter/Turoa

[Topographic map of New Zealand](#)

Getting to site

Drive into Ohakune on SH49. Opposite the i-SITE, turn onto Goldfinch Street towards Turoa ski field. Follow this road, which becomes Mangawhero Terrace and then Ohakune Mountain Road, as you head out of Ohakune.

Follow Ohakune Mountain Road for 20 km (about 25 minutes) to the end of the road at Turoa ski field. Park on the right side of the car park if possible.

Walk to the right side of the car park. There is a small drop down to the alpine flush.

The red dot on the map indicates the location of the study site.



Visitor facilities and parking

The car park at the ski field is large enough for multiple coaches and minibuses. Turoa ski field has no toilets for visitors; if open you can ask to use the staff facilities. The closest public toilet is in Ohakune.



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Recommended activities

- ▶ For pre- and post-field-trip learning activities see [Section 2](#).
- ▶ For information on NCEA assessment resources that could be linked to fieldwork at this site see [Section 3: Year 11–13 NCEA assessment resources](#).
- ▶ For ideas on practical learning activities across Tongariro National Park, see [Section 4](#):
 - Observation activity – page 9
 - Ideas for using study sites – page 10
 - Geology activity ideas – page 11
 - Human impact activities – pages 12 and 13.
- ▶ Using a measured transect or quadrat (1 x 1 m) you can investigate:
 - vegetation (eg tussock, vegetable sheep)
 - invertebrates (eg alpine grasshopper)
 - geology (eg rock types, erosion and origin).
- ▶ 5-minute bird count (eg pipit/pīhoihoi) – see [Experiencing Birds in your green space](#), page 10.
- ▶ Geology activity information in [Section 2](#), page 10. Geology activity sheets in [Section 7](#), pages 9–14.
- ▶ Useful wetland / stream monitoring tools:
 - [Wetland Monitoring Assessment Kit \(WETMAK\)](#)
 - [Stream Health Monitoring Assessment Kit \(SHMAK\)](#)
 - [NIWA Freshwater monitoring database](#)
 - [Take-Action for Water Resource](#)

Comparison sites

For an overview of study sites see [Section 4](#), page 7.

- ▶ *Ohakune Mountain Road site* for comparison with a comparatively drier environment at an unmodified site at similar altitude.
- ▶ *Mangawhero Forest Walk site* for comparison with a non-alpine forested environment and/or stream study.
- ▶ *Whakapapanui Walk site* for comparison with a non-alpine forested environment and/or stream study.

Health and safety

For general health and safety considerations see [Section 4](#), pages 8–9.

- ▶ Uneven rocky surface off the track. Be careful of trip hazards.
- ▶ Stream at this site – be careful when working around water.
- ▶ Weather – this site is exposed to the elements, and weather can change quickly. Make sure all students are prepared.
- ▶ Volcanically active area – make sure your group is aware of emergency warning and evacuation procedures. See www.doc.govt.nz/volcanicrisk
- Turoa ski field and car park can be operating, so beware of moving vehicles and machinery.

Education providers working here

Hillary Outdoors:

www.hillaryoutdoors.co.nz/portfolio/opc-tongariro-2

Other education experiences in the area

For further information on activities in this area, see:

[Ohakune Old Coach Road](#)

[Tongariro National Park information](#)

[Central North Island information](#)

