

Vegetation Pattern in North Island Mountains

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ABSTRACT

The high-mountain vegetation pattern of the North Island was briefly discussed with the aid of a vegetation map and a number of slides. High-mountain vegetation, which includes the vegetation of the cold temperate and subpolar (subalpine and alpine) zones, covers some 3,000 square miles (7%) of the North Island. Only 250 square miles of this (0.6% of the North Island) is in the subpolar zone and permanent snow occurs only on Mt. Ruapehu. The lower limit varies from about 3,000 ft. in the north down to 2,000 ft. near Wellington, with the subpolar zone commencing 2,000 ft. above that limit.

The principal areas of high mountain vegetation occur on the following mountain ranges and peaks (maximum altitude in feet): Aorangi Mts. (3,226), Rimutaka Ra. (3,086), Tararua Ra. (5,154), Ruahine Ra. (5,687), Kaweka Ra. (5,657), Kaimanawa Mts. (5,665), Mt. Ruapehu and other volcanoes of the central plateau (9,175), Mt. Egmont and Pouakai Ra. (8,260), Hauhungaroa Ra. (3,580), Ahimanawa Ra. (4,225), Huiarau Ra. (4,602), Raukumara Ra. (5,753).

A primary classification of North Island high-mountain vegetation is as follows:

Modified Indigenous Types—

- Cold temperate beech forest.
- Cold temperate podocarp-cedar dicotylous forest.
- Cold temperate composite scrub.
- Cold temperate shrub-tussock land.
- Subpolar tussock land.
- Subpolar fellfield, rock and scree (discontinuous cover of herbs and low shrubs).
- Subpolar barrens (few or no plants).

Man-made or Induced Types—

- Manuka scrub.
- Exotic grassland.
- Exotic forest.
- Eroded land (discontinuous forest, scrub or tussock).

The high-mountain vascular flora of the North Island consists of approximately 700 indigenous species and varieties. The majority of these have significantly disjunct or local distributions.