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Visitor Perceptions of Natural Hazards at Whakapapa and Turoa Ski
Areas, Mt Ruapehu

A thesis presented in partial fulfilment of the requirements for the degree of

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Abstract of a thesis submitted in partial fulfilment of the
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Visitor Perceptions of Natural Hazards at Whakapapa and Turoa Ski Areas,
Mt Ruapehu

By C. N. Milnes

Whakapapa and Turoa are ski areas located on the active volcano Mt Ruapehu, in the Central North Island of New Zealand. Mt Ruapehu is located within Tongariro National Park, one of the 14 National Parks administered by the Department of Conservation (DoC). Visitors to Whakapapa and Turoa ski areas encounter an array of hazards, including icy slopes, ragged cliffs and drop-offs, and thousands of other mountain users. Hazards unique to Whakapapa and Turoa include the threat to human safety from lahars, ash falls, pyroclastic flows, erosion, rock falls, crevassing and ballistic bombs due to the active volcanic nature of this mountain. Managing these hazards at Mt Ruapehu is complex due to the number of factors involved. This dynamic site hosts visitors who are moderately experienced and prepared, but may be complacent about the danger to personal safety within these areas.

The intention of this research was to investigate how the public perceives hazards at Whakapapa and Turoa ski areas at Mt Ruapehu, and look at the particular hazards to which visitors feel they have been exposed. In order to identify gaps in public awareness of hazards, the current study at Whakapapa and Turoa ski areas involved surveying 400 members of the public, analysing the output from these surveys, and conducting semi-structured interviews with staff from Ruapehu Alpine Lifts, Institute of Geological and Nuclear Science and DoC. RAL safety management staff, DoC staff, and GNS scientists were spoken to in regard to their role as hazard communicators through identification of ways that they present safety messages to ski area visitors.

A basic demographic profile of visitors to Whakapapa and Turoa ski areas was identified and problems of communicating risk to ski area users in terms of their tendency to overestimate ability and take significant risk were outlined. Visitors to Whakapapa and Turoa ski areas were shown to have only moderate awareness of hazards and a number of suggestions for ski area management are provided. The author has identified a number of areas where the public's knowledge and practice around hazards is lacking and has made recommendations for the stakeholders.

Key words: hazards, hazard perceptions, hazard management, visitor management, risk perceptions, Turoa, Whakapapa, Mt Ruapehu, skiing, snowboarding, volcanic hazards.

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