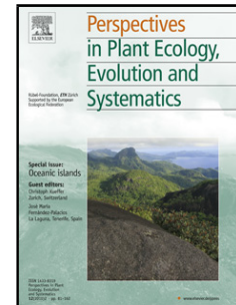


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Slow community responses but rapid species responses 14 years after alpine turf transplantation among snow cover zones, south–central New Zealand.

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Highlights Lord et al. PPEES Special Issue High altitude ecosystems

- Many species can persist more than eight years in zones with very different snow cover
- Snowbed turves transplanted to zones of lower snow cover suffer the highest level of species extinction and colonisation
- Survival of a transplanted focal snowbed species was strongly limited by exposure to a novel invertebrate herbivore
- The cosmopolitan lichen, *Thamnolia vermicularis*, rapidly responded to altered snow cover, demonstrating its value as a bioindicator.
- Transplant experiments can highlight critical abiotic and biotic factors affecting species survival under future climate conditions.

Abstract

Alpine ecosystems are particularly vulnerable to the impact of global climate change. Depth and duration of seasonal snow cover are major drivers of variation in alpine plant community composition, so a reduction in snow cover as a result of climate change would expose plants that are currently protected by snow in winter and spring to greater

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