

191 Carrs Road

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To Whom it may Concern

Dear Sir / Madam

Wilding control by pasture development and cropping

The natural regeneration of introduced conifers, or wilding spread, is a problem in many parts of this country, especially the drier eastern South Island hill and high country. Pukaki Downs station alongside L. Pukaki is particularly affected. Conifers, notably contorta pine (*Pinus contorta*), are spreading from early farm trees (established in the 1950s) and Government (Ministry of Works) plantings established alongside the lake in the 1970s.

There are many ways to control wildings, ranging from physical and mechanical removal, and chemical spraying, through to management of surrounding susceptible land. Control can be expensive, so the management option which combines production with control has obvious advantages. This is where cultivation to enable cropping and /or pasture development has an important role to play. Wildings cannot establish from seed where there is strong competition from vigorous crops or pasture species. Numerous examples of this exist. On the Canterbury plains, shelterbelts are comprised of many species, including contorta pine, but due to the intensive use of surrounding lands, wilding spread is a non-event.

Consequently, the use of cultivation for cropping and/or improved pasture development, is an attractive way to limit wilding spread on Pukaki Downs station. This is especially so on the better soils on the flat lands in the western half of the station, all of which are downwind of major conifer seed sources.

Over a number of years, Pukaki Downs has set an unprecedented example of how to use its own resources to control wilding spread. They have used recognised control methods combined with innovations of their own, all funded from their own pocket. There is no doubt that the current wilding cover on their property, plus the threat of spread further afield, would be considerably greater if such control had not been carried out. Hence it is important that they be given every opportunity to continue this management into the future.

Yours faithfully



Nick Ledgard

Authors credentials

- Nick Ledgard obtained a BSc (Botany) from Auckland, and an MSc (Forestry) from Bangor College of the University of Wales.
- He was employed as a scientist with Scion (NZ Forest Research Institute), based in Christchurch from 1971 to 2011. His specialist research area is in production and protection forestry in the South Island hill and high country.
- Since the early 1980s, he has carried out a number of research projects on conifer natural regeneration or wilding spread. Refereed papers on this topic have been published both

locally and overseas. From 2006 to 2011 he managed a wilding project for the South Island (now the New Zealand) Wilding Conifer Management group.

- He has given numerous presentations, and organised many workshops and field-days on wilding spread issues, and written twenty contract reports on the topic. Most of these have dealt with local histories of wilding spread, the current situation and future management options.