

The Forest Service's method of tackling natural erosion has created more headaches than it has solved. Wilding pines for erosion control of scree slopes, Marlborough. Photo: Craig Potton



The success of these introduced trees rests on their ability to shed large quantities of wind-borne seed and to grow in harsh conditions that our woody native species are less able to tolerate. In the mountains of New Zealand frequent and strong winds favour wind dispersed species such as conifers over species that do not normally spread far from the parent tree as with native beech trees. Pines are generally regarded as a pioneer species, favouring bare sites or sites with low grass or shrub cover. The hardier of the pines thrive in dry cold conditions, growing faster than natives and producing seed at an early age, a mere 5 years in the case of *Pinus contorta*.

### Control Problems

The control of wilding spread will not be an easy task. The first problem is perhaps one of awareness. Wilding trees are often well established and already seeding before people recognize that they pose a problem. By this time control is usually time consuming and expensive. The obligation of individuals and agencies to meet cost recovery targets engenders a cautious reluctance to commit funds to what is potentially a very expensive exercise.

Advocates of exotic trees insist that careful siting of plantings and choice of species, and appropriate management of downwind areas, will limit wilding spread. Using less aggressive species and avoiding "take-off sites" such as ridge tops or exposed slopes are suggested strategies. However, in the harsh climate of the mountainous areas where tree spread is a problem the most successful trees are also the most aggressive invaders. One seed can lead to the establishment of a tree that grows on to be a prolific seeder. Most seed falls near the parent tree but seedlings have been recorded 10 kms from the nearest seed source and winged seeds of pines aid in wind dispersal. Accurately predicting the direction and occurrence of strong winds or storms is impossible, making the identification of downwind areas for management very difficult. Suggested management includes mob-stocking with sheep and pasture improvement or cultivation. The many areas of uncontrolled wilding spread in the South Island high country testify to the failure of this management technique.

Seeding trees know no boundaries. Many wildings originate from plantings on adjoining properties or lands administered by different agencies or government departments. This makes effective management and control of wildings extremely difficult. Farmers with tree spread problems and agencies with conservation or weed control responsibilities are becoming increasingly concerned at the implications of wilding spread on conservation and agricultural land. At a recent planning hearing considering a proposal to plant Douglas fir in the Rangitata Valley, the Strathallan County Council insisted on the lodging of a \$30,000 guarantee by the applicant to ensure wilding control work would be undertaken and required that this guarantee be recorded on the title of the property.



Sweeping high country vistas such as this at Molesworth in Marlborough are now interrupted by an ever spreading carpet of wilding pines.

Photo: Craig Potton