

Saving Paradise

When I began this article I was projecting 100 years of inaction into the future in my home lands. But I have recently visited Zealandia in Wellington and found their projected vision for 500 years of action far more inspiring as a starter. They are hoping to restore the environment there to its original pre-human state 500 years hence. But I must take us back to that negative start to make the point. Bear with me

Project 100 years in the future as your great, great, maybe great, grandchildren travel across the Canterbury plains via jet-pack or some futuristic road transport to their playgrounds in the Castle Hill Basin. Who knows what new recreation has been invented in the mountains; have snow and rock sports gone to a level beyond our imagination?



No matter what the future holds in its uncertainties, there is one certainty - if we don't do something about the wilding pines resolutely marching eastward and southward throughout the basin, our descendants will find a landscape smothered in a thick green blanket that has totally forced our precious native flora into oblivion and severely impeded views of the mountains. In fact, they may have already marched their way over Porters Pass and be well on the way to invading the plains, knocking on the door of urban townships and the city, thanks to the prevailing winds.

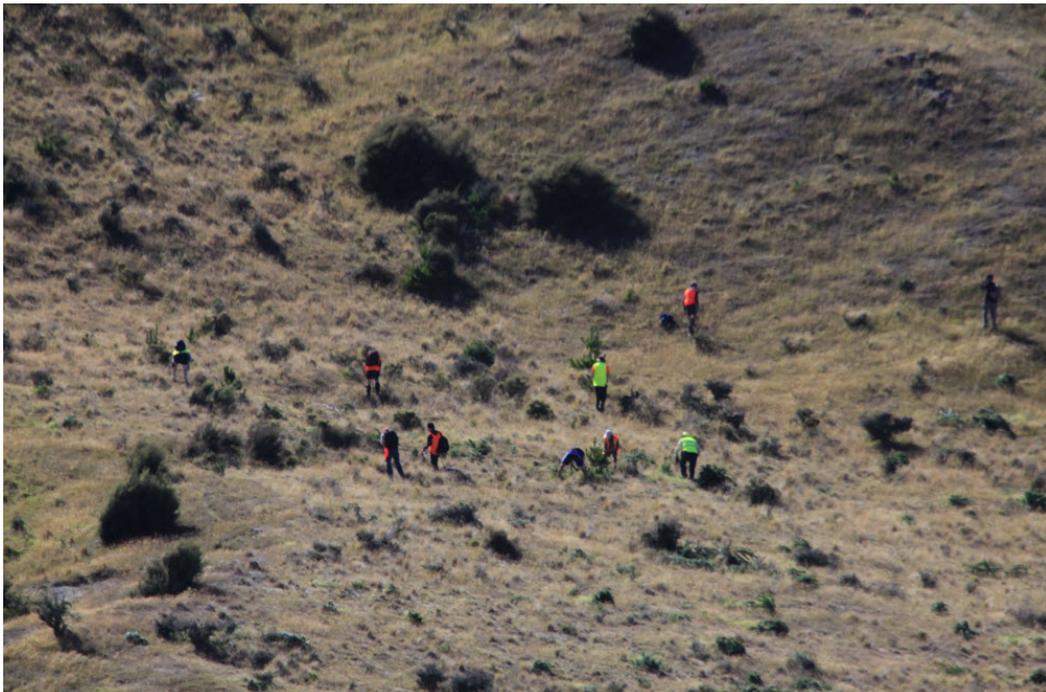
If you doubt my claim, here are some of the facts:

- In the 50's and 60's experiments by Forest Research Institute were in place in the Craigieburn Range, to find introduced species that would hold their own on, and stabilize, the erosion slopes of the mountains, particularly those induced by burning and grazing. Most species behaved well and circumspectly, growing in a quiet, non-exhibitionist way. But two main species relished the benign conditions presented to them compared to their harsher native North American climate:

Pinus contorta (Lodgepole pine in their native Canada), and Douglas Fir (Oregon Pine). A few years after planting they established themselves and generously spreading their progeny far and wide.

- A *Pinus contorta* seed can blow up to 10 kilometers in a strong nor-wester before it lands.
- It can then take root in any environment; any soil, any angle, any aspect, any rainfall, and remain viable for over 3 years.
- A *Pinus contorta* can produce seeding cones by the age 6
- One cone falling on the ground can sprout a clump of several trees.
- They can grow quickly, up to 60 or 80 centimeters in 12 months.
- If grazed, stock will keep young seedlings at bay, but ignore older ones. Keeping up the grazing pressure is a key to control.
- When cut, the slightest little bit of green matter left on the stump can re-grow a strong and viable tree.
- Douglas Fir are only slightly less potent and can invade pastureland as intensely; the landscape around Twizel and on the road to Mount Cook is an example.
- European Larch are rapidly gaining hold in this crew of invaders. (Its only redeeming features are its lovely colouring in spring and autumn.)

While it may look hopeless trying to stop this invasion from the road, take heart. Not only can you do something about it, but a group with the steely intention of tackling the problem exists. Already you can observe from State Highway 73 areas of dead trees, both cut and sprayed. What you can't see are the huge areas beyond visibility, in valleys, on distant ranges, and behind mountains, that have been cleared of invaders. Much of this country has been tackled by large groups of up to 100 volunteers at a time, coordinated by Environment Canterbury (ECan), who spend weekend days at the task. The thicker areas are dealt with by contractors, paid for from funding raised from various organisations, by the Waimakariri Ecological and Landscape Restoration Alliance (WELRA). This organisation consists of representatives from ECAN, Department of Conservation, landowners, the community, and the Canterbury Environmental Trust.



The Department of Conservation has a major role in the control of these pests, particularly as the wilding seed source was originally on Crown land inherited by DOC. They have worked as much as their restrictive allocated finances allow to remove all seed source trees, particularly those on Helicopter Hill which were the planted first. This is a high take-off area, being exposed to the nor-westers, and was dealt with first. Other high take-off areas are the focus on both Conservation and Flock Hill land.

The aim is to, in a pincer movement, bring back in the outer boundaries of the growth, creating a buffer zone, with volunteers, while tackling the more intense older stock with contractors using hand tools or spray on the ground, or from the air. Contractors are dropped off from choppers in high areas to work their way down with saws.

Spray trials have found an effective mix, which does minimal damage to the fragile natives underneath (although these stand no chance of survival as the pines thicken) but maximum damage to the pines. This is used from the air or on the ground.

Over the summer of 2011/12 huge areas were covered. The landscape will look different in 12 months time.



At Broad Stream an entomologist has identified a species of unique grasshoppers. Funding has been obtained to work specifically with the invasion of D. firs in this catchment.

The catchment of Cave Stream has been given high priority, and funding has been targeted from Ecan to clear the stream and its tributaries, some of which have virtually dried up due to wilding invasion.

Solid Energy is pioneering a relationship with WELRA, donating funds for spraying, and hours from staff for ground control with loppers and saws. It is hoped other companies will take up the challenge laid down by Solid Energy to take part in this battle.

So, dear readers, join us in the battle to restore one of New Zealand's most valuable, landscapes. Help us keep wilding pines clear of Kura Tawhiti, (the rock climbers' mecca), the slopes of the Craigieburn, Broken River, Cheeseman and Porters skifields (all already with wilding populations), the Cave Stream and Castle Hill Reserves, the iconic grasslands of local High Country Stations and the views of the Craigieburn and Torlesse Ranges. Your visits to the Waimakariri and Castle Hill Basins will be rewarded by your efforts in a landscape being restored to its natural one. Your descendants will thank you for it as they travel up here in whatever way they will, to do whatever they will in those distant days 100 or 500 years hence.

For more information go to www.welra.org.nz

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Bio for Maree:

Maree was a teacher and principal of a Christchurch primary school. She was an instructor and assessor for the NZ Mountain Safety Council. She is currently the Chairperson ('Mayor') of the Castle Hill Community Association. She is a member of the Canterbury Environmental Trust and the Waimakariri Ecological & Landscape Restoration Alliance (WELRA). She currently lives at Castle Hill Village in the Craigieburn Range.

