

Wilding control on Flock Hill station

Travellers familiar with the SH73 route from Christchurch to Arthurs Pass cannot have missed the thickening spread of wildings on Flock Hill station opposite the ski-field access roads into Craigieburn Forest Park. Most observers will be concerned by such sights and wondering if the situation is 'out of control', with nothing being done - to the extent that wildings will eventually take over the whole basin. The reality is that a wilding control plan was written a number of years ago, and even though it may not appear so, its current implementation means that 'no, the situation is not out of control – and yes, plenty is being done'.

The wildings are 99% contorta pine, which have spread from revegetation plantings established to the west of the highway in research trials and on high eroding faces. This took place mostly in the 1960s, but from this time on, the wilding threat posed by contorta pine was realized and no further planting of this species (apart from a few small plots) was attempted. However, by then a source of seed was well established, and it is this which has parented much of the subsequent spread to the east onto Flock Hill station



Year 2000 - looking east over Flock Hill flats from near the Broken River access road entry on SH73.

Year 2006. The same view – the rampant invasion of these flats is far more recent than most people realize.

Other species, such as mountain pine, Douglas-fir and larch are also present, but contorta is by far the worst, largely because it has the lightest seed (blown furthest) and matures to produce cones at a young age (first species to 'in-fill' around lone outlier trees).

The reason why most people consider the situation to be getting worse is because the area of thickening trees closest to the road is not the highest priority for removal. The control strategy is initially containment to this core area, with the focus of attention being to remove elevated seed sources within the Park (mainly on Helicopter Hill) and the distant outlier wildings, plus trees on high, exposed seed 'take-off' sites on Flock Hill (the majority of these are on and beyond Constitution or Broken Hill). This is to prevent new areas being invaded and the core area of dense spread from getting even larger.

Over the past few years, thousands of hours have been spent by contractors and volunteers removing marginal trees outside the core wilding area. At the same time, research has been perfecting new means for killing wildings. The recently-adopted 'basal bark' chemical application technique, which can be applied both from the

ground and from helicopters, means that limited funds can now be used over much larger areas than previously. The technique has also become the most cost-effective for spraying dense wildings, and the more observant SH73 drivers will have noticed the browning of dense areas over recent weeks, as attention is being turned to the core wilding affected area close to the highway.

In conclusion, the Flock Hill wilding situation is far from 'out of control', with hundreds of thousands of dollars being spent to implement a plan for total wilding removal. Progress so far has been good, BUT there is still a long way to go for complete success. Much will depend on our ability to persist for many years to come, and on the availability of the considerable funding needed to implement the control plan.

Finally, complete removal is certainly possible – a good, although much smaller, example is present alongside SH73 only a few kilometers distant to the south. Not so long ago, contorta pine wildings were common around the northern end of L. Lyndon and to the east over Porters pass. They came from a small patch of trees planted by the present toilet block in the 1950s and removed in the 1980s. Without the removal of this patch and the removal of resultant wildings over many years, there is little doubt that we would now be driving alongside a wall of pines between the Pass and the lake. Whereas today, not a single pine can be seen. And to end on a really positive note, before they were removed, the original patch of contorta pine was used as a nurse crop to establish the mountain beech trees which are still present to the north of the lake.



View from Hut Creek saddle in 1980, before wildings were obvious on Flock Hill.

Harvesting conifers at Craigieburn

Those travelling along SH73 from Christchurch to Arthurs Pass will have noticed the wilding removals (felling and spraying) and the forest harvesting taking place on Flock Hill station and by the access roads up into Craigieburn Forest Park. This is all part of WELRA's implementation of a comprehensive wilding control plan initiated a few years back.

The harvesting is of Douglas-fir, European larch, ponderosa pine and Corsican pine stands, mostly established between 1979-1982, although the oldest D-fir stand by the Craigieburn ski-field road was planted in the 1960s. These were the most valuable trees, as the others were a little too young to have reached their full potential. However, they were felled early in order to raise money for wilding control, and because the D-fir were parenting wildings much further afield. Compared to the D-fir, spread from the larch and ponderosa has only been local, and Corsican pine at this altitude is a very shy seed producer.

As with any plantation felling, the initial post-harvest scene is one of comparative desolation, which often attracts adverse comment (especially alongside a major highway). In reality over most of NZ, the hectares of bare ground are soon revegetated by new plantings or grass invasion, and are very quickly far less noticeable. However, at Craigieburn, there will be no new conifer plantings – in fact the major risk is that the disturbed ground promotes a new crop of wildings, probably of contorta pine, the most aggressive spreading species. In order to avoid this, the harvested hectares will probably be sprayed to control wildings before being sown with a vigorous sward of grass/legumes to prevent further wilding establishment. Such a herbaceous sward is the easiest to manage for the strategic establishment of new species, the most desirable of which would be mountain beech.



Plantation harvesting alongside SH73 by Craigieburn Forest Park.

These trees are being felled to remove wilding seed sources and to raise funds for wilding removal on Flock Hill station.