

The Story of Blackhead Pypgrass by Kay Griffiths and Alan Lee (DoC)

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Once upon a time, not all that long ago, a farmer, who was also the Minister of Agriculture at the time, was given a plant that promised to stabilize his sand-dune country. He duly planted it, and it grew! And grew, and grew and grew!

That plant was pypgrass (*Ehrharta villosa*), a grass native to South Africa, and the time was the 1950's. The patch of pypgrass grew from the original planting of just 10 square feet to cover about 4 hectares by 1999. The sand dunes were on private land, out of sight of public, so the only reason the pypgrass was discovered was that Department of Conservation (DoC) in Palmerston North had put an eradication programme in place for another site of pypgrass on the west coast and came across some old notes about it being planted on a farm near Blackhead too. We went to investigate and found a dense infestation of this plant, which has the potential to invade dune systems right around New Zealand, as it has done in Australia.

And so the challenge of eradication at this site began! Over the first few years a herbicide specifically to kill grasses was used with fairly good success – about 80 % of the original infestation was killed. However, there still remained parts of the infestation in high light conditions that just didn't seem to be succumbing to the herbicide. It was around this time that management of the eradication programme moved over from DoC to MAF BNZ.

A national management plan for identified pypgrass sites was based on sound advice from experts around the country, and started off with a "de-limiting" survey – that is looking intensively all around the known infestation for any outlying bits. This is most important in an eradication programme as it ensures that no bits of the infestation are missed. Then a strong herbicide was applied – this time Roundup Transorb™ at 5% concentration was used with a very good result.

After one application, all of the pypgrass that had been sprayed was dead after a few weeks. Even the underground rhizomes appeared to be dead, which was the best response hoped for. Over the following year after that first application, the site was searched several times to look for any small bits of pypgrass that had been missed. Any bits found were sprayed with the same herbicide mix, and these too have all died.

And so it is that we are very hopeful that pypgrass is well on the way to being eradicated at this site. Work will continue over the next few years to ensure that there are no more stray bits out there, and that eradication really is complete.

And the sand-dunes can live happily ever after!