Fay, N. (2004). Survey methods and development of innovative arboricultural techniques: key UK veteran tree sites. Available at www.treeworks.co.uk/press\_ releases\_publications.php

Jamil, S. (1998). A survey of rare and threatened trees in plant collections in New Zealand. BApplSc(Hons) project.

Kenny, P. (2001). Review of S.W. Burstall's notable and historic tree listing, Tauranga District Council and Western Bay of Plenty District Council. Waikato Polytechnic, Department of Horticulture, Hamilton.

MacKay, M.B. (1995). A survey of exotic tree collections in New Zealand. Horticulture in New Zealand 6(1): 42-46.

MacKay, M.B. (1996). Management of the plant collection at the Eastwoodhill Arboretum. Unpublished PhD study, Massey University.

Moohan, S. (2000). Review of S.W. Burstall's notable and historic tree listing, Hamilton City. Waikato Polytechnic, Department of Horticulture, Hamilton. Unpublished.

Rob Graham is the principle tutor in the Diploma in Arboriculture programme at Wintec. He wrote a previous article for our journal on 'Assessment of hazardous trees' (New Zealand Garden Journal, 2007, Vol. 10(1): 2-5).

## Wilderness to wine: Otago's garden

## Dave Cull<sup>1</sup>

In this article I explore human influences on Central Otago, as an isolated wilderness in the past, and as the garden it is today and beyond.

New Zealand's history is littered with examples of extractive industries. In simple terms, these industries aim to extract as much of whatever resource one wants as possible without worrying too much about replacing it or what effect the extraction has on the environment.

People of all cultures have been pillaging their environment in this way for as long as we have been human. In New Zealand it started with Maori exploitation of the moa. Maori burned large areas of bush in places like Central Otago to limit the birds' cover and perhaps even wiped out a couple of other large avian species that were not used to predation by humans. Still, bad as that was, there is only so much damage people can do with wood and stone tools. The technologies developed in the Northern Hemisphere over the past 1000 years enabled Europeans to cause damage on a much wider scale. From the 1700s onwards, sealers and whalers led the charge around the New Zealand coastline,

slaughtering several species almost to extinction. Central Otago was late in being exploited, although ironically for centuries before European contact, Maori had traversed the region on their way to the West Coast looking for pounamu/greenstone, another extractive industry. The first Europeans moving into Central Otago and intending to stay were sheep herders, but they only just managed to beat the ultimate extractors, the gold prospectors. From 1861 onwards a swarm of human 'maggots' burrowed under Central Otago's rivers and streams, tunnelled into its hillsides and valley bottoms and spewed up heaps of tailings and waste in their wake. They made a hell of a mess, some of which ironically is now preserved as historic remains, a 19th century heritage.

Among those earliest Europeans, only the farmers could be said to literally put down roots. They (or in many cases probably their wives) planted gardens and home orchards as it became clear that the climate and land suited certain fruits and vegetables. And it does; the clear cold snaps definitely affect the flavours produced there. This is received knowledge in that part of the world.

I was brought up in Southland and there it is accepted that root crops like swedes, potatoes, and even carrots and parsnips are not at their best until they have had a touch of frost. It is interesting that the region in the North Island best known for carrots is Ohakune, right under a ski-field. It seems that the climatic extremes in Central Otago, both diurnal and seasonal, play a big part in the excellence of fruit grown there.

The first fruit trees planted as a commercial crop in Central Otago are credited to Jean Desire Feraud, a French gold miner and first mayor of Clyde. He developed a garden and orchard near Clyde and, although it might be an apocryphal story, he is also credited with introducing wild thyme (Thymus vulgaris), that ubiquitous lavender-blue herb now cloaking Central Otago's hillsides (Fig. 1).

However, Feraud is best known for apparently planting the first grapevines in Central Otago in 1864. He made wine from his grapes and went on to win prizes for those wines at the Melbourne Royal Show.

Now you could say that Feraud's planting marked the transition from a largely exploitative or extractive

<sup>&</sup>lt;sup>1</sup> Dunedin City Council, PO Box 5045, Moray Place, Dunedin 9058; dcull@dcc.govt.nz

economy based on gold in Central Otago, to a sustainable one. In fact more than that, to a garden based economy. But I'll come back to that.



**Fig. 1** Wild thyme near Clyde, Central Otago. Photo: Barrie Wills, Kiwlmages.

Sadly Feraud didn't stay long. He sold his property in 1882 and moved on. So why were his fruit and wine enterprises unsuccessful?

Two reasons spring to mind. First, the route between Clyde and Dunedin, his nearest large population market. was at best a rough track. His fruit would have spoiled long before it arrived. That is if it wasn't bruised to death beforehand. And the wine? Before I answer that let's go forward to 1895 and the arrival of another European, Romeo Bragato, a Yugoslav, in those days probably called a Dalmatian, educated as a viticulturist in Italy and Bordeaux. He arrived from Australia, as the Victorian State Government viticulturist on loan to the New Zealand Government. Bragato landed in Bluff and travelled northwards assessing various regions for their suitability for grape growing. He found several places within New Zealand that he favoured, and of Central Otago he said, "There is no better country on earth to produce Burgundy." Red Burgundy wine is Pinot Noir. This was back in 1895.

So we had a situation in Central Otago where a French orchardist produced award-winning wines in the mid 1870s, and just 20 years later the very same area is described by an internationally trained viticulturist as eminently suitable for wine production.

But no commercial viticulture got underway there until about the mid 1980s, nearly a century later!

Why? I think we have to consider the people who lived in Otago and where they came from, and this is the reason I believe that Jean Feraud's wine business didn't succeed.





Fig. 2 Vineyards of Central Otago. A, green vines against clay bluffs in Felton Road, near Bannockburn. Photo: Wikimedia (http://commons.wikimedia.org/). B, McArthur Ridge pinot noir vineyard in winter. Photo: Barrie Wills, Kiwlmages.

The Otago settlers at that time came predominantly from Scotland, especially those immigrants in Dunedin. And also from Ireland and England with quite a few Chinese too, but very few others. What did they drink? I can't speak authoritatively about the Chinese, but Anglo-Saxons, particularly the working class, drank beer and whisky. Take an Irishman or Scot pretty much anywhere and eventually they will make whisky.

The thing is, Central Otago in particular, and indeed most of New Zealand, simply didn't have a wine culture. Even in the warmer North Island, vineyards were planted by two main groups. The first group were the gentlemen farmers, and the wine they made was mostly for their own consumption. Their vineyards almost all disappeared, though some have been resurrected over the past 30 years.

The second group were the Dalmatians. Wherever they settled they planted grapes because wine was an integral part of their native culture. They stuck to it and even now Dalmatian names still appear on wine labels: names like Babich, Nobilo and Delegat.

Nevertheless, Feraud's orchard and pioneering vineyard in Central Otago were short-lived because the overwhelming majority of New Zealanders didn't drink wine at all – not until well after World War II. So for a long part of New Zealand's history there was virtually no market for wine.

Although vineyards in Central Otago didn't fully establish until the 1980s (Fig. 2 A-B), from the mid-1890s onwards there was a lot of discussion about the possibilities of fruit-growing. manufacturing fruit preserves and fruit drying in Central Otago. All of the stone and berry fruits were considered suitable for growing in Central Otago by horticultural experts of the day. Lack of reliable transport to market was cited as the major obstacle by prospective growers, but that all changed with the building of the railway line from Dunedin to Cromwell. The railway was completed in stages over 38 years. Starting in 1879 at Wingatui just outside Dunedin, it arrived in Middlemarch in 1891, in Clyde in 1907 and finally in Cromwell in 1917. And sure enough the orchard industry did develop strongly there from the early years of the 20th century. You can understand how important the railway was for transporting fruit when you consider that most road transport prior to WWI was horse drawn. Cartage of perishable produce from Central Otago to Dunedin by horse was not feasible.

The man largely responsible for pushing the railway project forward was Member of Parliament and later first chairman of the Otago Central Railway League, Vincent Pyke. PM Richard Seddon called him "the father of the line", such was Pyke's determination to push the project ahead.

Pyke's primary reason for promoting the railway was his belief that Central Otago was what he called "the garden of Otago". Pyke reckoned the garden was cut off from its markets and the port (Port Chalmers) that could access them.

So way back in 1890, when Central Otago was still an isolated frontier region, with a short-lived golden past and a few gigantic, rabbit-infested sheep runs, its potential as a productive garden was clearly recognised. Which is something of a wonder don't you think?

But there was another element in people's attitude to Central Otago and that was its scenery. Queenstown was a tourist destination by 1900 even though at that time it didn't even have road access. Tourists had to travel from Invercargill through Lumsden and then take the lake steamer from Kingston to Queenstown.

So despite all the ravages, Maori having burned much of the forest cover, sheep herders having burned the remaining beech forest and scrub to open up the land for grazing, gold miners with their digging, sluicing and tunnelling, despite all that, the incredible presence and beauty of Central Otago still shines through. The striking combinations of schist, tumbling water, sunshine, tussock, snow and thyme continue to make it a unique and stunning place.

So what of Central Otago today? Well it's still very much a garden. And in addition to the hundreds of hectares of cherries, plums, apricots, nectarines, peaches and apples (Fig. 3), Central Otago is the fastest growing wine region in New Zealand. The area planted in grapes has tripled in less than ten years and now occupies more than 1500 hectares.



Fig. 3 Gala apples growing in a Central Otago orchard. Photo: Barrie Wills, Kiwlmages

And there's something else about regional gardens. What you grow in them expresses something of the locale. Whether it's tulips from Amsterdam, wild-flowers in Western Australia, or Scottish heather - their scent, form and colour all tell vou something about the place. With wine, it's called 'terroir', the French

term for how the wine expresses all the various local influences - soil. topography and climate and some would say even viticulture, the influence of the gardener. Only now after some 25 years of reasonably consistent winemaking is Central Otago's terroir, or maybe that should be terroirs, emerging.

Central Otago Pinot Noir at its best is a canvas of herbal notes, slightly leathery tannin, ripe fruit and dry stony flints. Just like the place where it is grown.

Central Otago is of course also a premier tourist destination within New Zealand. That's because of the sheer grandeur of the place - its stunning contrasts that seem to heighten all the senses.

So you could say that Otago's garden, or even the South Island's garden, is planted in the most beautiful part of our country. One of the things I value about that is the fact that many of the region's vineyards and orchards are indeed treated as gardens. They are set out beautifully and designed to be attractive as well as productive. Looked at from a distance the arrangements of vines, fruit trees (Fig. 4), shelter belts (Fig. 5), rose plantings, walls and hedges remind me of a large scale potager (kitchen) garden (Fig. 6). The appearance of our surroundings is important. We have to live, work and play in them so the more attractive they are the better. For a tourist destination this is doubly important.

The important message here is that attitude, that perspective, can be expanded to encompass our whole landscape. Imagine what we could gain by viewing our entire landscape as an enormous garden.

And when you think about it, some of the best known and most admired landscapes in the world are wine regions. I'm thinking of Tuscany in Italy and parts of Provence in France. It's not just the vines of course. The whole tapestry of lavender or sunflower fields, rows of poplars and cypresses, old hilltop manors and walled villages, taken together can create one enormous garden vista. These are vistas that have developed over centuries. They can't be created overnight, but they can be lost very quickly.



Fig. 4 Old Sanders apricot orchard. Graveyard Gully Road, Alexandra. Photo: Barrie Wills, Kiwlmages



Fig. 5 Tasman poplar shelterbelt in winter. Photo: Barrie Wills, Kiwlmages.



Fig. 6 Omeo Orchards in autumn, Earnscleugh. Photo: Barrie Wills, Kiwlmages.

In Central Otago we obviously couldn't have a completely domesticated 'garden'. It is hard to imagine being remotely able to domesticate the Central Otago landscape even if you wanted to and you certainly wouldn't. But by cooperating with nature and the backdrops, features and textures she has bequeathed us, we could ensure that our own efforts, be they farming, building, developing properties or businesses, would enhance that garden rather than detract from it.

In fact, elements of this attitude are starting to creep into district plans. Previously planners concentrated on amenity values. What can and should we do in this place? Now planners are increasingly looking at landscape values when deciding what activities and structures should be allowed in particular areas. Personally I think this is a great way of considering our environment



Unfortunately it seems to be only applied where the landscape is considered outstanding or significant. So we have tedious arguments at Resource Consent hearings about whether a landscape where someone wants to build, for example, a wind farm is of local significance, regional significance or national significance! The inference seems to be that if it doesn't meet any of those tests then it can be treated and despoiled any way we like.

This is of course of huge importance to Central Otago, to its tourist industry, and to those of us who simply love and value the place. While it is clear that many areas cannot be locked up against development, we accept that some are; for instance our national parks. So limiting the types and scale of developments is nothing unusual. Perhaps we need to consider which developments would be of most benefit and more crucially, are the most sustainable. We naturally want to enjoy and develop our garden landscapes for generations. The landscape of Central Otago is appreciated, indeed loved, because of its wildness, its energy and its untamed contrasts. I would argue that vineyards and orchards can be a charming counterpoint to that. But that wildness also provides temptations to trap, to tame, Central Otago's energy (Fig. 7).

Fig. 7 Upper Nevis Valley, Central Otago. This remote valley has exceptional natural and historic values, with undisturbed examples of the early gold workings, settlement buildings, and a cemetery. Nevis Valley is subject to controversial and renewed discussion to dam the catchment for hydroelectric generation. Photo: Tim

Right now the Central Otago community is wrestling with the options of covering huge swathes of rolling tussock-covered hill-top with wind farms. And of further harnessing and constraining the mighty Clutha with yet more dams, so the river could become just a string of long lakes. How much of that harnessing, taming and constricting can you do before you have destroyed what you most valued in the first place? Before you have wrecked the 'garden'?

Of course some may argue that it's nonsense to say that by damming and generating power from a river, or by harnessing the wind with regiments of wind turbines, we could be destroying the place. Not destroying it completely obviously, but changing it profoundly. And you are changing it by taking some of its energy, some of its essence, just as a leech might take blood from your leg. You are extracting a resource, some of the life of a place and not replacing it. Eventually you have simply returned to an extractive mode of exploitation again, and the landscape is just a trussed up and exhausted shell of itself.

This concern is not restricted to Central Otago. New Zealand is one of the most varied and scenic countries on the planet. The range of landscapes with their textures of waterways, mountains, plains, beaches. forests and tussocklands is immense. So our range of potential landscape gardens is immense too. Perhaps it would be productive to narrow our eyes as it were and, squinting into the future as we gaze at our vistas, try to imagine what those landscape gardens might be like if we could do the very best garden planning job we

could imagine into the distant future.

That vision might give us something to measure suggested 'developments' against. Rather than allowing our landscapes to develop in an ad hoc manner, maybe we could turn the whole process on its head and ask, "What would we like our landscape. our 'garden' to be like into the future?" And then set about achieving that.

## **Acknowledgements**

I wish to thank Dr Barrie Wills (Alexandra), Tim Johnson (Christchurch), and an anonymous Wikimedia contributor for the images used in this article.

Dave Cull is a Councillor for the South Dunedin Ward. Dave works as a television, video and seminar presenter and writer. His interests include fishing, gardening, building and design, wine, history and politics.

Born in Invercargill and a longstanding resident of Dunedin, Dave is a great enthusiast for Central Otago, where he has holidayed and visited all his life. His long love of and interest in the region, as well as his taste for good wine led him to write the 2001 book Vineyards on the Edge: The Story of Central Otago Wine.