

# Tiger by the tail

## Vivienne McLean

In 1998 Cliff Heraud, a retired King Country farmer living at Kuaotunu 17km north of Whitianga on the eastern seaboard of the Coromandel Peninsula got to thinking about ways to celebrate the approaching new millennium. Planting kauri at local kindergartens was one good way of marking the occasion. However after a few more thoughts and a few conversations with friends, the scale of the concept grew rapidly. Today Kauri 2000 is a long term project to recreate significant stands of kauri on publicly-owned land on the Coromandel Peninsula, under the banner Plant a kauri — recreate a forest.

## Some history

The felling of the great kauri forests of the Coromandel is well documented. There are numerous tales about the rigours of bush life and the skills of the colourful characters who felled these mighty trees and created ingenious dams to drive the huge logs downstream to waiting booms, ready for barging to Auckland.

From about 1830 onwards, teams of pit sawyers had moved into the forests, with kauri the preferred timber for builders and ship builders because of its durability, strength, straightness, even grain, lack of knots and ease of working. As well as the timber, kauri was also prized for its gum, used in high quality paints and varnishes. However the process of 'bleeding' kauri for their gum caused the early death of many trees.

The first sawmills, with their far greater cutting capacity, were established in the late 1830s. They proliferated rapidly in response to the increasing demand for timber, particularly with the onset of the Coromandel gold rush in the late 1860s and 1870s, but by the 1880s expansion had outstripped demand and many mills went bankrupt.

This depression dragged on until 1897 when the last great boom period began. Already 75% of the kauri forests had been felled, but the cutting rate accelerated again. The year 1907 was the peak year

for production and export of kauri timber, after which a steady decline set in, with only comparatively minor amounts being cut in the last 50 years.

The kauri dams are the last reminders of the once thriving kauri industry on the Coromandel Peninsula. They were used to store water to wash the felled logs downstream in massive log drives. Estimates of the number of dams constructed in the Kauaeranga Valley near Thames alone range from around 60 to over 100, built across most of the streams in the valley. Logs were also taken from the bush by bullock teams, stationary steam traction motors and by rail.

Kauri logging in the Kauaeranga Valley lasted 60 years from 1870, during which 200 million superfeet of timber was removed. An average kauri contained 1,000 to 5,000 superfeet, the largest up to 7,000.

## Lost timber

The biggest ever drive in the 1920s sent 28,000 logs down river. In all, between 1,918 and 2,892 million feet of kauri was felled, but it is estimated only 20% reached the booms. The remainder was lost, most of it smashed up in the driving process. In the first drive over Billygoat Falls, 100,000 feet of kauri went over but only 10,000 came through intact. To complete the destruction, huge forest fires often followed the kauri logging.

Logging of kauri forests on the peninsula continued until the 1970s. Government policy had changed over the years, not only because of the dwindling resource but also in the face of mounting public pressure to save the remaining forests. The New Kauri Policy finally came into effect on 26 February 1973, largely thanks to campaigners like Rei Hamon. This saw felling finally cease on the Coromandel peninsula, but in many places kauri had been logged to extinction, with insufficient seed trees left standing to reproduce themselves. The stands that did survive were only saved by their remote locations and the ruggedness of the Coromandel terrain.

## Remaining stands

With all this destruction, what is left of the original forests today? Max Johnston of Peninsula Environmental Practice has had extensive experience with kauri in the NZ Forest Service, and is the advisor on the establishment and management of its kauri plantings. He says the Manaia Sanctuary contains some of the best remnant stands of mature trees surviving on the Peninsula, with approximately 410 trees mainly over-mature in an area of 101 hectares. These include *Tanenui*, the largest surviving kauri on the Coromandel and the sixth largest surviving kauri in New Zealand. It measures 10.97 metres in girth, but has a clean bole height of 15.85 metres and a total height of 47.24 metres.

The Waiau Falls Scenic Reserve has several dozen large mature kauri trees and is a popular stopping point. The Waiomu Valley has more than 200 trees, apparently in excellent condition with very good crowns and some light bleed marks completely healed over. The Third Branch of the Tairua River has over 300 trees but many of these are also reportedly over-mature, dying and decaying.

Beyond these stands, mature kauri trees are scattered on the flanks of the Coromandel Range and the hinterland – numbers estimated to be around 500 in number. There are also quite substantial areas of seedlings, saplings and poles in the Kennedy Bay, Otama and Whenuakite areas, with scatterings of regenerating kauri elsewhere.

## First steps to the future

Against this background it seemed rather fitting that we should mark the start of the new millennium by taking the first steps towards a future when groves of these beautiful trees will once again dominate the forest canopy, with the potential to endure into the fourth millennium. It is this long term vision that seems to have captured people's imagination.

We are not the first to plant kauri of course. In the early 1970s the Forest Service planted about 40,000 kauri in the Coromandel Forest Park as part of a strategy to preserve kauri in natural and managed stands. However many of these did not survive due to lack of releasing, or records of their location were lost with the disbanding of the department.

Many individual landowners have also planted significant numbers, a prime example is Barry Brickell of Driving Creek Railway. Jim Davies of Coromandel, this year's Husqvarna North Island Farm Forester of the Year, has also planted some

5000 kauri in regenerating bush on the steep slopes of his farm, intending these to become a production forest in due course.

## How it works

The Kauri 2000 Trust has worked mainly with the Department of Conservation, but also Transit NZ, the Thames-Coromandel District Council, reserve management groups and occasionally landowners, to identify planting sites on publicly owned or covenanted land. It is a fundamental principle that we plant on land that will remain in public ownership in perpetuity, where free right of access can be guaranteed. Ease of access is important not only for maintaining and caring for the trees but also so our donors can visit their trees.

Kauri 2000 is still very much based on the founding concept of appealing to the general population for support. The project allows people with any sort of connection to the peninsula to contribute to an environmental project in a way that gives them some sense of involvement and ownership, even though they might be urban apartment dwellers in Auckland, in the depths of Southland or back home in Germany, Russia or England.

Anyone can take part – families, individuals, whanau, friends, visitors from within New Zealand or overseas, communities, business and schools. All people need to do is make their donation we do the rest.

We try and encourage people to plant kauri every year – for each of their children, their grandchildren, a new baby, to remember a special person or a loved one, to remember a special holiday or anniversary, or Christmas gift.

If people are visiting we suggest there is no better way to remember their visit to the Coromandel `Even though you're far away, you'll know there'll always be a piece of your heart in the kauri forests of the Coromandel. And what better incentive to return!'

## The nuts and bolts

Every donation of \$15 or gift voucher purchased helps plant a kauri on a Kauri 2000 planting site. For \$10 extra, donors can also have their name and an inscription attached to a signboard at the stand, personalising their connection with Kauri 2000 even further. Initially we attached an aluminium tag to the individual tree, but this has since proved to be a logistical nightmare.

We send each donor a commemorative certificate identifying where their tree has been planted, so they can visit it in years to come. We frequently get enquiries from people, especially overseas visitors, wanting to do just this.

## Planting



**Local farmer Paul Denton has kept a watchful eye on Kauri 2000's Waikawau site – his work releasing is paying off.**

The Kauri 2000 Trust orders seedlings, prepares site management plans and arranges for sites to be cleared and prepared for planting. Seedlings are raised from eco-sourced seed, with the bulk of our supply grown for us by the Taupo Native Plant Nursery, as well as some local nurserymen. Seedlings must be at least 500 to 600mm tall, healthy and weed free, although some years we have decided to accept smaller trees due to a bad growing season.

Site preparation is carried out by paid contractors and includes spraying for weeds such as blackberry as well as line cutting. Planting takes place in June each year so the trees will establish well before summer, which can be very dry.

The planters, all volunteers, are a diverse and enthusiastic bunch – from Brownies, schools and foreign language students, to Lions, garden clubs, families, companies and the general public. Seedlings are planted at approximately four metre spacing with slow release fertiliser and generally with Saturaid, and staked if necessary on more exposed sites.

## Monitoring and maintenance

The location of all planting sites and trees is recorded in the Kauri 2000 database. We monitor tree health at each site and have made a public commitment to maintain all planting sites until the trees are established – for some three to five years, or longer if the site requires. It is this commitment to continue maintaining our trees that differentiates us from so many other one-off volunteer planting efforts. We will replant trees in the first year or so if the site is suitable but we do not guarantee to always replace seedlings or tags. The reality is that for the bulk of our plantings, apart from the few in formal park settings, we will need to continue with annual inspections, releasing and in future, light well cutting, for 10 years or so.

In the enthusiasm of our early years volunteers planted around 3000 trees each year – 6500 in one memorable year. We really did have, as Patron Dame Cath Tizard described it, 'a tiger by the tail'. The Trust has made a conscious decision to ease back to planting around 1500 to 2000 annually, so we can focus on maintaining the trees already in the ground.

Even at a reduced planting rate, we will need to care for around 25,000 trees a year potentially for the next five years, dropping to about 17,000 after that. And even assuming that trees may only need releasing every second or third year once established, this has huge implications financially.

## Costs and funding

Diversification is a time-honoured survival strategy for nature, businesses and volunteer organisations alike, and right from the start Kauri 2000 has avoided becoming tied to any one major sponsor. Like other similar conservation groups we tread the well-worn paths to the various funding organisations and we are immensely grateful to the Department of Conservation, the Lotto Millennium and Environment & Heritage Funds, WWF, Environment Waikato, the Thames-Coromandel District Council, Pub Charities, Trust Waikato and others for their generous support over the years.

Public donations remain an important source of funding. Individuals and families can support Kauri 2000 at any level, from single or multiple \$15 donations, by becoming a Friend of Kauri 2000 for an annual membership of \$20, through to Green Leaf Donors (\$500) and Gold Leaf Donors (\$1000). We have also benefited from the commitment of



**Patron Dame Cath Tizard and founder Cliff Heraud plant the 20,000<sup>th</sup> kauri in Kuaotunu.**

companies such as environmental consultancy Hill Young Cooper and ATL Systems.

However our standout benefactors have to be Charlie and Gayle Panczewski, an American couple who have given their hearts to New Zealand and to the kauri. They return to Northland every year to press their olives, and catch up on Kauri 2000 achievements. Without their generosity, enthusiasm and counsel we would only have made a fraction of the progress we have enjoyed so far. Chasing money is time consuming. The Trust has a part-time co-ordinator who is paid an honorarium, but has recently established a sub-committee of three trustees to step up its fund raising efforts.

## Promotion

Because public donations are so important to our work we aim to maintain a high profile for Kauri 2000. We got off to a great start when Cath Tizard ceremonially planted the first kauri at the Department of Conservation's Kauaeranga Visitor Centre on 7 August, 1999 and made the 6 o'clock news on TV One. The donations poured in. Kauri 2000 has featured on the Maggie Barry Garden Show, on Spectrum and in major articles in the *NZ Herald* and other print media. New millennium fever has now abated, but that initial publicity helped establish us in the public's minds.

We still enjoy tremendous support from the local press, but also use our brochure, website [www.kauri2000.co.nz](http://www.kauri2000.co.nz) and a biannual newsletter to reach new donors and communicate with supporters. The tourist sector is an important target market and we try to ensure our brochure and newsletters are available in information centres, various retail outlets, museums, motels and backpackers lodges around the Peninsula. We also erect interpretive signs at strategic locations.

## What have we achieved?

In nearly ten years Kauri 2000 has planted just over 23,000 kauri seedlings on 33 sites around the Coromandel peninsula. Some of our more notable locations include the following.

Chelmsford on the Kopu-Hikui Road, including our Puketui Road, Tairua River site, is our largest site by far. Planting first started here in 2000 and to date nearly 8000 trees have been planted there – it has involved huge effort by many volunteers year after year and is a real tribute to the organiser, trustee Cherry Ladd.

Kauri Hill, Coromandel is an outstanding location, with some 3500 trees planted since 2001, stunning views and a walkway system established by another local trust that makes this one of our showcase sites.

Our plantings at Shakespeare Cliff and the Cathedral Cove Reserve are not extensive – less than 1000 – but these sites are visited by thousands of tourists annually. Prime Minister Helen Clarke planted our 10,000<sup>th</sup> kauri at Shakespeare Cliff in 2001. We started planting on DOC land in the Kauaeranga Valley with high hopes. With its rich kauri history, DOC's visitor centre full of kauri memorabilia and displays, and thousands of trampers enjoying the bush every year, this could have been our major planting site. Some 1600 seedlings were planted starting in 2000 but the rampant pampas grass has forced us to abandon plans for further planting. Regrowth of pines has also meant this site has needed major releasing, although the kauri have generally grown well and are three metres tall in some cases.

Our plantings at Waikawau did not get off to a promising start due to the vigorous kikuyu and paspalum. However with consistent releasing over the years creating individual microclimates around each tree, the grasses have actually proved beneficial. The trees are growing healthily and can now be seen from the road. This is another site that potentially could enjoy high visitor numbers, as it is over the road from a large DOC camping ground.

Our site on DOC land at Waitaia was originally covered in two metre high blackberry and constant vigilance is needed to prevent it getting away again. About 175 seedlings were planted on an open flat area in the year 2000 followed by 400 on a ridge under regenerating bush in 2001.

The open flat area has proved something of a conundrum. While some trees have flourished and are now over two metres high, in one particular area seedlings have consistently failed to establish, despite two further attempts at replanting. We can only guess at something in the soil – maybe heavy metals or some other legacy from mining days?

DOC's Matarangi Reserve is our newest site. This has the potential to become a flagship site for us, totalling some 253 hectares in regenerating bush. Max has identified an initial 10 to 12 hectare planting area with potential for 6,000 to 7,000 trees and in

2006 and 2007 we planted 1400 trees. However the potential is much greater, with strong local community support from local Kuaotunu, Rings Beach and Matarangi residents to develop a network of walking tracks working with Coastal Walkways.

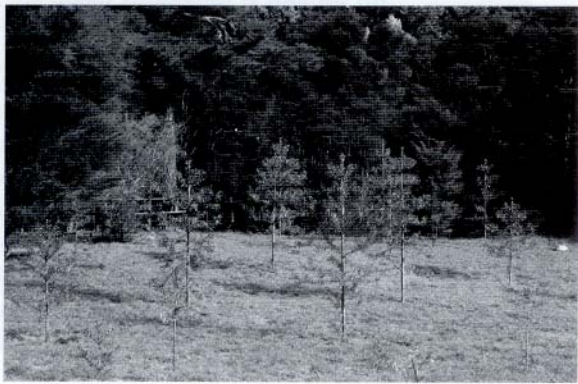
## Audit

In 2002 then Forest Research (now Scion) indigenous forest management unit senior scientist Dr David Bergin audited every Kauri 2000 planting site. He found that 'in general, planning, site selection, planting and maintenance has been carried out to a very high standard and this is reflected in the good early performance achieved on most sites.' Although we have not been able to undertake a second audit, we are confident that we have more than maintained these initial standards and our emphasis on regular site maintenance will ensure a high rate of survival and healthy trees.

David Bergin said in his report: 'The success of community inspired and run initiatives to achieve goals particularly in the natural albeit often degraded local environment is increasing and is in contrast to failures of programmes in the past that have not had a large community involvement. The challenge is now for resource managing authorities and research providers to work along side community groups in partnership to contribute to the success of such initiatives so that programmes become more effective in achieving environmental and social goals.'

We have certainly been fortunate in our partnership with DOC, whose Hauraki Area staff and particularly area manager John Gaukrodger have not only supported us as far as they can within their limited financial resources, but more importantly with encouragement and advice. With a Memorandum of Understanding about to be signed we are confident our kauri will enjoy the guardianship of DOC into the future.

It is probably fitting that the last word should come from DOC's John Gaukrodger, who when asked once what he felt was the value of the project pointed out that, although kauri are not a threatened species on the peninsula, Kauri 2000 was contributing by re-establishing kauri in areas that had been so heavily logged and burned that kauri would take decades to come back – if ever. More importantly, he said, Kauri 2000 sends a powerful environmental message, that individuals in a community CAN make a difference.



**Before and after – our Waitaia site in 2001, 2005 and today.**