

TE HANGA SOUTH TRUST 2018 Annual Report



Te Hanga land planted in 2011. Trees pruned to approximately 6.5 metres. Photo December 2018.



EXECUTIVE SUMMARY

- Te Hanga South Trust is a Maori land Trust charged with managing land on behalf of shareholders. The land is located on Kakahu Road on the south western slopes of the Kaimai range between State Highways 5 and 29. The majority of the land is farmed with a transition in place from drystock to dairy and dairy support. In 2011 approximately 14 hectares was planted in radiata pine on a weed infested hillside. In 2013 approximately 2 hectares of mature radiata was harvested and replanted the same year.
- Both stands have been planted with improved radiata seedlings and both stands are now well
 established. Tending is well underway with the older stand having received a final prune
 during the year and the younger stand having received a first prune during the year under
 review.
- The major activity in the forest over the past year has been completion of pruning in the 2011 stand and a first prune in the 2013 stand. The 2011 stand has been pruned to 6.5 metres and the 2013 stand to 4.5 metres. This saw 298 stems per hectare pruned to 4.4 metres. One further prune followed by thinning will see the tending in this stand completed.
- Both stands are growing well and are generally healthy. Some *Dothistroma* infection is present but it is expected that pruning will manage this. Some possum damage is also present in the older stand and requires control.
- Expenditure for the past year was \$16,821. This was \$9,229 below the budget proposed for the year mostly due to some pruning costs being carried forward into the 2019 year. The proposed 2019 budget is \$27,700, with the majority of this being a thinning of the 2011 stand and completion of pruning in the 2011 and 2013 stands. A budget provision has also been made for animal pest control due to the incidence of possum damage in the trees.
- The forest assets are not currently insured and this is something the Trustees may wish to
 consider at some point. It is noted however that the forest assets are only a small part of the
 overall picture and needs to be considered in the larger perspective.
- As reported last year the forestry sector is going through a period of stability and relatively strong prices. This is further supported by the current Government placing considerable emphasis on the forestry sector to achieve several goals. It is hoped this enthusiasm continues and this delivers the desired results. Opposing this has been the introduction of the National Environmental Standard for Plantation Forestry which imposes some additional constraints and conditions on the activities associated with planting trees, building roads and harvesting forests, especially on erosion prone or vulnerable sites.



1 INTRODUCTION

The land Te Hanga South Trust is responsible for is located on the lower, western slopes of the Kaimai Ranges. Most of the land is leased to a local dairy farmer while some area remains in native vegetation. More recently, the Trust has also planted some areas into plantation forest.

Two areas have been established. The first in 2011 was on land that was previously farmed and was reverting to gorse. This area is 14.1 hectares with about 2.2 hectares of this planted over the legal boundary (OLB). This OLB area is a result of fences being established on ridges in the past, not directly on the boundary. It is not expected this will cause any issue in the future as the adjacent land is all in native forest and there is no other access to the site where these trees are planted other than through Te Hanga.

This stand is planted on a generally steeper face that runs up to the adjoining conservation land with a small flatter area a the top.

The second area is 1.7 hectares which was planted following the harvest of the previous crop on this site. This area is a small rough gully on the flatter area of the farm. Planting of this area occurred in 2013.

This report provides an update of the work completed over the year under review (2018), an update on expenditure for the year and a proposed budget for work required in the coming year. Also included is some commentary about the general state of the forestry sector. This information does not require any action but is simply provided so that Trustees are a little more aware of activity in a sector they are invested into.

The report is prepared as part of the management contract between Te Hanga and Hammond Resource Management Ltd.



2013 stand, December 2018



The past year has seen considerable development and growth in the forest. Additionally, there has bene considerable investment in the tree crop in the form of pruning in both stands. This is significant as the largest costs for the forest have now been incurred and while there is further cost in the next couple of years, the scale of those costs is declining.

Once tending is complete, the forest will be allowed to grow on towards maturity.

One of the original factors in deciding to plant the larger block was the presence of very heavy gorse infestation. A combination of aggressive control by the farmer and the shading effect of the trees has significantly reduced the amount of gorse present and this should continue for the life of the forest.

2 PROPERTY DESCRIPTION

The Te Hanga properties are located midway between State Highway 5 and 29 over the Kaimai Ranges. The land lies on the south-western slopes of the ranges and ranges from flat to steep with the majority being relatively easy contour to rolling. Access is from Kakahu Road, a district council road managed by South Waikato and Matamata-Piako District Councils.

The land falls over the boundary of the two Councils but to date forest activity is restricted to South Waikato administered areas. This is fortunate as this Council has considerable knowledge and understanding of the forestry sector.

A major watercourse dissects the property and protection of this water course and its water quality are a priority for both environmental and cultural reasons.

The land has considerable historical links for the shareholders and while the existence of some archaeological sites and wahi tapu are known, it is possible that others also exist and suitable controls and care are therefore required.

From a forestry perspective, the land is extremely well located being within 70 kilometres of all major markets for logs in the central North Island. In particular the proximity to the port in Tauranga ensures that transport costs for logs will be controlled at harvest time and in turn this will enhance the return to the owners. In addition to the export port at Tauranga, there is also considerable processing capacity within 70km of the land including Rotorua, Putaruru and Kinleith.

The significance of location with regard to transport costs and value of a forest continues to increase. Well located forests with good access continue to derive considerably increased returns at harvest time, and are more likely to attract harvest operators due to reduced travel time for the crews during harvest.

Further advantages the property enjoys from a forestry perspective are the deep and well drained soils with a history of fertiliser and a relatively benign climate for tree growth. One downside of the site is the periodic strong winds that come off the Kaimai ranges. These have the potential to damage tree crops with one wind event having already occurred.



3 CLIMATE

The past year has been good for tree growth with plenty of regular rain and no damaging wind events. This has meant little or no damage to the trees from wind.

The wetter conditions do have the potential to increase disease in the trees, but this has been largely offset by the tending that has been carried out.

Tending will also improve the stability of the trees and reduce the threat posed by wind once the trees have adjusted to the changes brought about by tending.

4 MANAGEMENT ACTIVITIES

Tending of the tree crop has been the major activity over the past year. This has added considerable value to the forest asset.

4.1 Roads and Tracks

As in previous years, roads and tracks around the property are associated and maintained by the farming operation. The only forestry dedicated track is the one to the top of the hill in the older block. This has been used for access for pruning operations but continues to be increasingly overgrown and would benefit from some weed control. Provided there is access for tending, there is no real need for additional work on these tracks for the forest activity.

4.2 Animal Pest Control

Possum damage has continued at lower levels than in past years and some ongoing control is recommended. Previously, some control was carried out by farm staff but this appears to have ceased recently.

Possum damage generally occurs in spring when the new growing season begins. The possums strip bark from the stem and growing tips of the trees causing the death of that part of the tree and deformation of the stem as the tree recovers.

No formal pest control has been undertaken in the past year.

4.3 Fencing and Maintenance

Tracks and fences are maintained and managed as part of the farming operation. There has been some recent damage to the fence at the bottom of the older stand and this has allowed cattle to get among the trees. Unfortunately, this has also resulted in some stock damage (in the form of bark stripping) to the tree crop.

The older trees are becoming less susceptible to damage from stock, but it is still recommended that stock be excluded fort a little longer, and importantly, cattle are excluded in the spring time when the bark tends to be soft and more palatable.

4.4 Insurance

No insurance cover is in place for the forest assets to date. There are two main perils for which insurance needs to be considered. The first is loss to fire and the second is loss to wind. Unfortunately wind is the highest risk and is the hardest to get cover for.



Cover for wind is difficult to get and generally does not cover the entire value of the asset and is not available for trees under 5 years old. The oldest stand now meets the 5 year threshold so consideration could be given to insuring this stand.

Previous reports have noted that while fire is a risk to forests, the location at the back of the farm should mean the risk of fire is lowered. The most likely cause of a fire is an occurrence as a result of the farming operation, for example a tractor catching fire. In an event such as this, damage to the forest asset should be covered by the Public Liability cover the farming operation should have in place.

Given the age of the older trees (now 7.5 years old), and the increasing value of these trees, especially as the investment into pruning is added in, the Trustees may wish to consider insuring the forest. The risk at present is considered limited in the context of the larger farming operation and is one the Trust should consider as part of their overall business. If the decision is to insure the trees, this can be put in place at any stage.

Arrangement of insurance is part of the normal forest management agreement and a renewal date of August is usually used. It is certainly more valuable to have insurance once the trees are able to be covered for wind as this is the biggest risk, but as the trees only make up a small part of the Trust's assets, the risk needs to be considered in the larger context.

4.5 Forest Health

The overall health of the two stands remains good. Trees are generally deep green with good crown depth and few issues.

As noted above, possums are causing some damage in the older stand resulting in some deformed and damaged trees. This should not cause significant issues to the final crop but control of the possums is now required.

Previously there was some issue with the needle cast fungus, *Dothistroma* in the younger stand with some infection also present on the top flat of the older stand. With pruning underway and thinning planned, this disease should pose less of a threat to the trees for the next few years.

As has been previously noted, given the history of fertiliser and farming on the site, it is unlikely that any nutrition issues will be present and the generally good colour supports this view. Trees generally have a much lower nutrient demand than pasture, hence the use of fertilizer is the exception rather than the norm.



Bark Damage to trees in 2011 stand. Photo December 2018

4.6 Pruning

The major activity within the forest in the past year was a final prune of the 2011 stand and a first prune of the younger stand.

At the time of preparing this report, these tasks have not quite been completed but will be finished in January 2019. The quality of the pruning has been very good and excellent pruned heights achieved. The contractor has been tasked with pruning a few more trees to ensure the correct stocking has been achieved as quality control showed the stoking to be light in some areas of the stand. This is not an issue for the Trust as the contractor is paid per tree, not by the hectare. Independent plotting is carried out to ensure the correct number of trees and the quality has been achieved.

2011 Stand	
Pruned height	6.5 metres
Total Height	12.1 metres
Pruned Stocking	263 trees/ha
Total Stocking	653 trees/ha
DBH	20.8 cm

The 2013 stand has received its first prune achieving a pruned height of 4.5 metres.



5 EXPENDITURE

The table below details the expenditure incurred in the forest in 2018. As can be seen there was an increased level of activity and this will continue for the next few years. These costs exclude GST.

Operation	Budget (\$)	Actual (\$)	Variance (\$)	Comments
Roads and Tracks	1,000	0	0	
Pruning and Regen removal	20,700	14,821	5879	Majority completed
Forest Health	500	0	500	
Pest Control	1850	0	0	Work not completed
Annual Management	2,000	2,000	0	
Total	\$26,050	\$16,821	\$9,229	

6 PROPOSED BUDGET 2019

The following section is presented to indicate planned activity and expenditure for 2019 and assumes plantings will be maintained as required including ongoing pruning and thinning.

6.1 Roads and Tracks

As noted above, the majority of the roads and tracks are maintained as part of the farming operation, so no allowance is made for any activity on these.

6.2 Animal Control

It is now necessary to carry out some possum control within the forest to prevent further damage. An allowance has been made for this.

6.3 Forest Health

The health of the trees will be monitored as part of forest management activity. A small budget is allowed for to permit an aerial inspection of the trees should this be required.

6.4 Insurance

As noted above Insurance is something the Trust may wish to consider putting in place in due course. For the purposes of this budget, it has been assumed that no cover will be affected in the 2019 year, so no allowance has been made for this. However, it is suggested that consideration be given to whether cover and at what level is appropriate.

6.5 Pruning

The 2011 stand has received its final prune but there is some final invoicing to come through for this. This has been allowed for in the proposed budget. A second prune of the 2013 stand is also budgeted for. This will complete the pruning required for both stands.

6.6 Grazing

There has been some past cattle damage to trees and there is a decreasing amount of feed available within the stand. For planning purposes, any request for grazing by the farm will be considered on a case by case basis. It is however expected that the grazing available within the trees does not justify the effort except in extreme circumstances (eg a drought). As also noted above, there has been some recent damage to a few trees.



6.7 Thinning

Following pruning it is necessary to thin out the unpruned trees to allow the pruned crop trees room to grow. A budget for thinning the 2011 stand is included here. Further thinning will be required next year to complete this task in both stands.

6.8 Budget Summary

The table below summarises the expected costs for the next 12 months for Te Hanga. This is based on 14 hectares planted in 2011 and 2 hectares planted in 2013. These costs include management costs but exclude GST.

Operation	Budget (\$)	Comments
Animal Pest control	2,500	
Pruning (2011 & 2013 stands)	9,900	Final prune of 2013, tidy up 2011 stand
Thinning 2011 stand	12,600	
Forest Health	700	
Annual Management	2,000	
Total	\$27,700	

With all operations, every effort will be made to keep costs as low as possible.

7 FOREST SECTOR ACTIVITY

In a similar manner to 2017, the recently completed year has been a reasonably strong year for the forestry sector. Log prices continue to be around multi-decade highs and have been remarkably stable. As the new (2019) starts up, all the signals remain positive, although as always this cold change quickly (as it has in the past) with the greatest risk being events or relating to China and its willingness and ability to trade.

In addition to strength in the export log price, domestic demand for logs has been consistent, and perhaps most importantly we have a government that is especially interested in forestry and is committed to seeing the sector grow and contribute to our national wellbeing.

Government initiatives including the Billion Trees Programme, changes to the Emissions Trading Scheme and other initiatives and incentives to plant trees have certainly lifted the sector's profile. There is no doubt that the forestry sector can deliver a lot more than it has in the past, but to do this, a receptive political climate is required, as is certainty about what the rules for the sector will face.

Within the sector there has been an ongoing focus on innovation, especially in harvesting and improvements to safety initiatives. The sector's safety record remains a cause for concern but has improved considerably. It is also fair to say there is no forestry activity that does not have a strong focus on safety.

However, there is some concern that possible changes to illegal drug legislation may create some real challenges to both employers and employees in the sector and at this stage, how this may be managed is unknown.



One of the real challenges facing the sector (and indeed all primary sector industries) is having access to skilled and motivated workforce in the n umbers and locations where the work is located. As the early 1990s plantings come up for harvest, there are ever greater pressures to find the right people to get all the work done. The result of this is difficult and remote blocks are getting hard to find people willing to harvest them at an affordable price, and as has been discovered with the Billion Trees, getting people to plant and prune forests is a huge challenge and is in fact the weak link that could cause some failures in the system.

Last year it was noted that there had been little or no new land planting for several years. In the past 12 months this has turned around and this coming winter is likely to see significant new land planting. It remains to be seen how much of this is in commercial timber species and how much is in species planted for other reasons like honey and carbon.

For Te Hanga, most of this is of largely academic interest currently. Nevertheless, it is encouraging to be part of a sector that is riding the wave, is supported by government and is doing quite well in its own right.

Te Hanga's own forest stands are continuing to grow well and develop and have received considerable additional investment over the past year in the form of pruning. Completion of the pruning programme and subsequent thinning will see the end of the tending programme at which point the trees are left to grow to maturity and to provide a long-term benefit to Te Hanga owners.

8 SUMMARY

Work within the two forest stands continues as planned and continues to add value to the forest crop. The trees are in generally good health and growing well. The only real issues are the small amount of cattle damage and the possum damage noted above.

The forestry sector in the wider sense is also performing well and is very much on the radar for government. In turn this means a focus from government on how to resolve some of the issues the sector faces and how to maximise the benefits to NZ.

The budget presented above provides for the ongoing management of the forest assets on Te Hanga and approval of this budget is sought.

Should there be any questions, please get in touch.

Don Hammond
Managing Director
Hammond Resource Management Ltd



Appendix One – Map

