

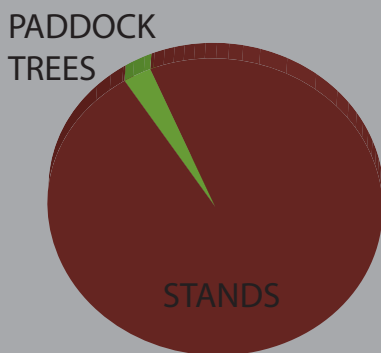
# Study Area Results

## Methodology

- Pilot study area of approx 47,000 ha in Whangaroa selected.
- High resolution aerial photography obtained.
- Totara stands and paddock trees mapped and classified by size and stocking.
- Sample of Totara inventory plots and paddock trees measured and classified for form/quality.
- Results correlated with the Land Cover Database and extrapolated outside sample area.

In total 1226 ha were mapped in the mapping sample (2.6% of the total 47,579 ha study area). Of this 444.6 hectares were mapped as totara stands.

Figure 1  
Totara Tree Type by Total Volume m<sup>3</sup>



The total tree volume estimated in the study area was 453,860 m<sup>3</sup> for stands and 27,340 m<sup>3</sup> for paddock trees.

Totara were placed into one of five tree form classes:

1. Excellent
2. Good
3. Fair
4. Poor
5. Non merchantable

Figure 2  
Stand Trees (m<sup>3</sup>) by Form

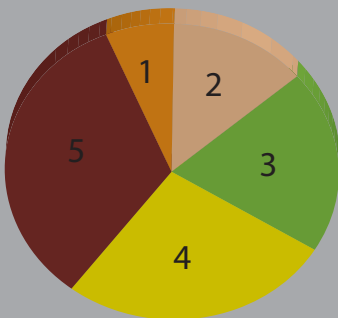
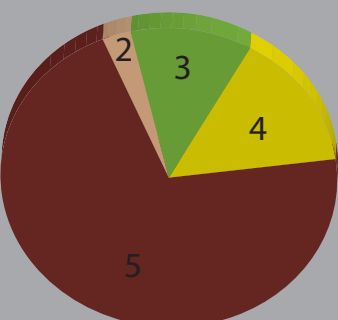


Figure 3  
Paddock Trees (m<sup>3</sup>) by Form

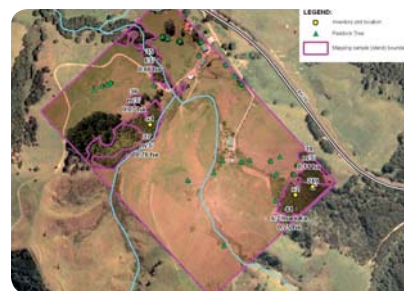


# JUST HOW MUCH TOTARA IS GROWING IN NORTHLAND?



A project to develop a method for estimating the resource of totara is one of the initiatives underway by the Northland Totara Working Group.

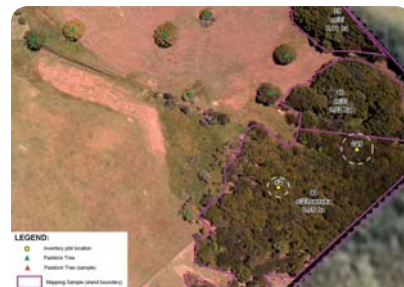
A preliminary survey of totara regenerating on farms indicates there is likely to be hundreds of thousands of hectares of totara in Northland that could be managed for long-term specialty timber production.



The survey methodology has been trialed in the Whangaroa area using aerial photography, digital mapping technology and forestry inventory methods.

The results of this pilot study provide a preliminary estimate of the quantity and quality of the existing totara resource on private land. This confirms a large resource of regenerating totara exists.

Although the resource is often judged by the scattered individual trees seen in open paddocks, the largest proportion are actually found in dense groups, stands and in scrub areas. Predominantly the trees are small to medium in size with highly variable form.



**This survey reinforces the scope to improve tree quality through silvicultural operations - potentially leading to significantly improved quality of recoverable timber in the future.**

Thanks to the ASB Community Trust for funding this project. NRC also assisted with printing of the report.

