

LIMITED SCALE LOGGING IN NORTHLAND

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Introduction

Northland represents a large tract of country and I cannot claim to speak for the whole area. My comments relate principally to the Whangarei area with which I have had most experience.

Limited Scale Logging I have interpreted as being the harvesting of farm woodlots and shelterbelts, which in most cases tend to be very limited in area and value. Logging of small piece sizes, I suggest, should also be included. When one looks at the resource, Whangarei currently has approximately 1,300,000 m³ growing with an annual increment of 156,000 m³/yr. The area weighted average age is only 8 years.

Age Clas	% of Total Crop	
1-5	45	Total area = 11458 ha
6-10	30	
11-15	13	

Over three-quarters of the crop is not yet at a merchantable thinning stage, let alone clearfell.

Of the remaining 12% which is some 1,580 ha aged from 16-80 years, only 252 ha is in private hands (i.e. other than the State).

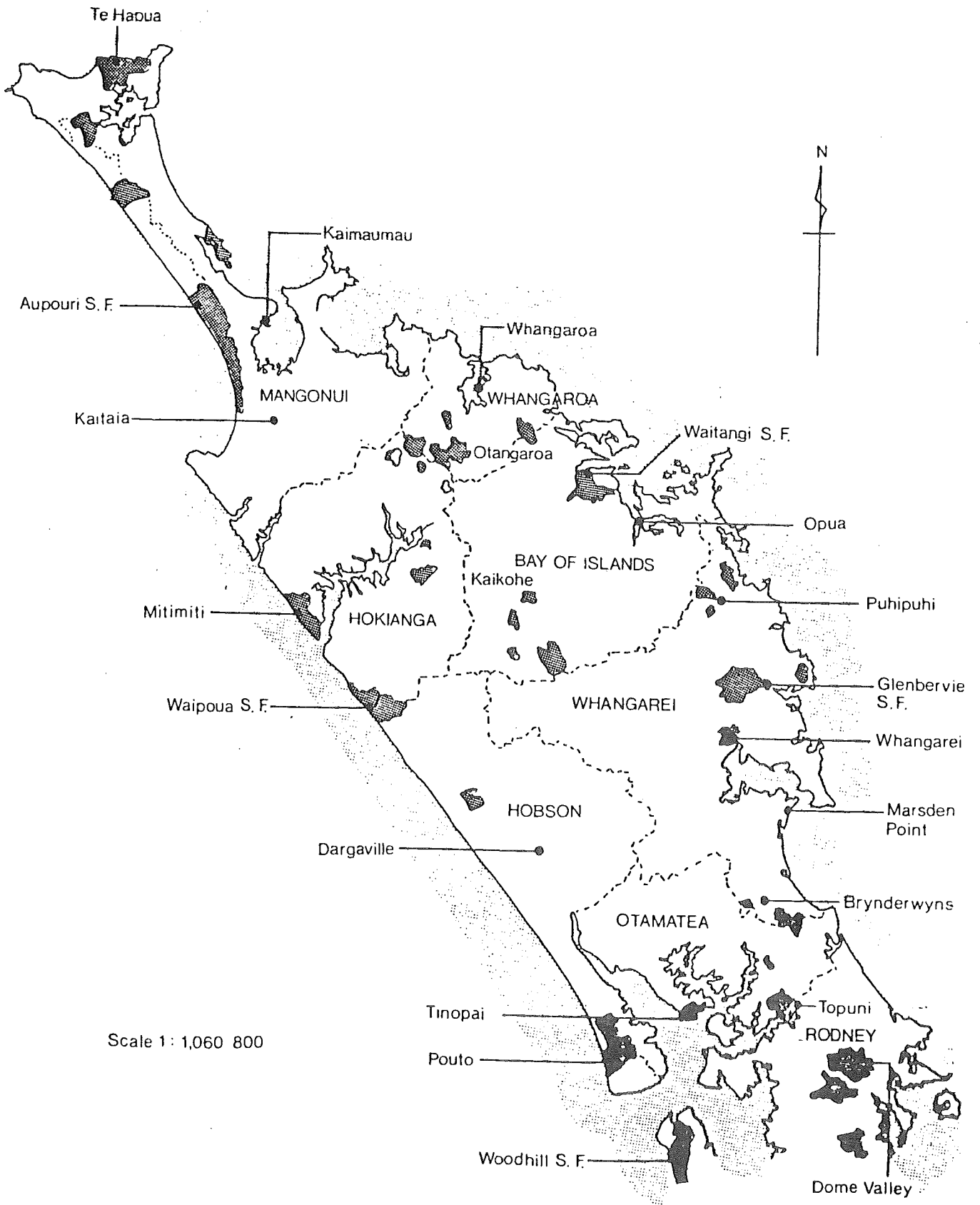
With these statistics we can expect a shortage of sawlogs at the region's sawmills. In fact larger structural sizes have been hard to obtain from local merchants. Apart from the logging of roundwood for the well supplied post and pole market, everything else below small sawlog size is thinned to waste.

Terrain

Northland is characterised by rolling to steep terrain which has a diversity of soil types, many of which are unstable. Generally wet winters limit conventional logging to the summer, although there is the exception of the three large sand areas : North Kaipara Head, Hokianga and Aupouri.

The existing forest roading access is mostly inadequate, and represented by class II or clay tracks on unstable country. In fact three weeks before this conference Northland was completely isolated by major slips. The quality of the roading places limits on the size and configuration of logging trucks, which increases

Northland Forestry Areas



unit log transport costs. The shape of Northland - long and narrow - and the dispersed resource add to the cost of cartage.

The Logging Workforce

In the Whangarei area there is a total of eight major contractors employing around 26-30 men between them. They have all been in the business for five or more years. Of the eight :

- 1 is cable logging in State forest;
- 6 alternate between larger contracts and farm woodlot logging;
- 1 logs smallwood only.

These major contractors demonstrate reasonable skills in logging and management but there is a high turnover in labour and crews have an acute shortage of trained personnel. From Auckland north, no training seems available at all.

Besides the established contractors there are itinerant (or seasonal) loggers. These operate mostly on farm woodlots and generally at the thinning stage. Some characteristics are :

- they have limited or no real training in the basic skills, let alone advanced techniques;
- if they have a contract it is short term only;
- they are under-capitalised;
- they have poor equipment and/or overpowered machinery. The combination results in high maintenance and running cost;
- they have poor management skills and when they start to employ labour forget that they need to produce also;
- safety standards are poor;
- the labour is completely unskilled.

Such a logger, when he finally arrives on the job, is likely to cut a swathe through the easy parts of the block and then have :

- labour problems, turnover and hence low production;
- machine breakages;
- weather problems because he started too late in the season;
- financial problems (machine repossessions);
- material left in the bush - which represents wasted effort.

The itinerant logger won't bring out sawlogs or fails to cut strainers in post blocks, and often can't get a post peeler. The result is poor returns for all concerned and poor material presented. As a silvicultural operation, damage to the final crop makes it a disaster.

There is another class of logger - the portable sawmiller. Again he is a rather gypsy character with most of the characteristics of the itinerant logger. I am not aware of any rich portable sawmillers and yet at last count there are at least 54 of these machines in the north. In some respects it continues the

tradition from the kauri logging days when there was vast over-cut capability and under-utilisation of available machinery.

Results

The result from these operations (or 'predations') is a very disappointed and disillusioned forest owner. In most cases the owner did not have a clear perception of what was involved until too late. Nor did he enter a formal contract, assuming instead that the contractor knew what he was doing.

Proposed 'trade-offs' as a means of royalty (i.e. finished posts in exchange for cutting rights) do not materialise and if the final crop is to be salvaged a further cleanup operation is necessary. The forest owner comes to regard the timber industry and the principle of farm forestry with extreme suspicion.

Notably though, those growers that have formal contracts and seek consultants advice don't seem to have many problems.

Requirements of the Industry

What is required is a competent contractor with a well trained crew and sufficient contracts or continuous blocks for five years work. This would allow reliable repayment on machinery. The equipment needs to be portable for operations on small blocks, and should have the ability to handle complete operations from the forest to the mill in order to maximise returns.

I also recommend a pricing system on roundwood that rewards forest owners for better class material and encourages the loggers to recover this.

Ironically a catch-22 situation can develop on pricing. If the piece rate to the contractor is increased more itinerant loggers appear, resulting in less produce per worker, poorer quality production etc.

My own approach to logging smallwood is :

- operate as a free agent;
- will operate under a formal contract if required;
- will act as consultant for produce that is too big for my equipment;
- I can provide an advisory service for other contractors requiring method analysis etc;
- I handle the full operation from the bush to the mill to maximise returns - I market the material I produce myself and this includes posts and poles, sawlogs, battens and a little special purpose native timber cut into baulks.

Equipment Operated

My equipment includes :

- Iseki T500 farm tractor with an Iglan double drum winch of three tonne line pull. This is bush rigged and includes a front end loader. The strops are polypropylene.
- Bedford flat-deck truck with a 6 m tray. This is for the cartage of small logs and post material.
- Small mill with a 3.3 m carriage.
- Husqvarna chainsaws.

With all equipment preventative maintenance is practised.

Methods

The approach adopted depends on the particular block. The wood can be extracted either in long length or from stacks of cut to length wood in the bush. Stacks are hauled using two winch ropes as this provides more control of the drag and reduces damage to the final crop.

The system is capable of averaging 35 cubic metres per day.

The machine is so set up that normal three point linkage equipment can be used (e.g. rotary slasher for tree releasing). Thus although the logging may only be seasonal, silvicultural applications can be used to extend the machine's usage.

The Future

A prominent feature of Northland's logging industry is the lack of trained personnel. Training courses should be given priority in this area.

The volume of smallwood coming on stream requires the special matching of machinery and techniques to the resource. Only with appropriate techniques will the returns to both the grower and the contractor be maximised.



Iseki T500 with double-drum winch

(LIRA Photo CN61/3)