

KAINGAROA LOGGING IN THE 1950s

R.Y. COLLINS  
Officer in Charge  
Minginui Forest

For the decade of the 1950s logging in Kaingaroa Forest was an era of compromise, adaption and learning.

In the aftermath of the Second World War, there was a critical shortage of manpower, what expertise in logging there was, came from "native" bushmen; machinery, and equipment was mostly adapted from war surplus, or native (indigenous) logging. Most new equipment was imported from Britain, New Zealand's favoured trading partner, a nation not famous for the manufacture of logging equipment.

Logging first commenced in 1938 when a small circular mill was established, namely to cut timber required to build Waipa Sawmill. Logging was on a very small scale.

In 1940 Waipa Sawmill started drawing its logs from Whakarewarewa Forest in both thinnings and clearfelling.

In 1946 clearfelling within the Waireka area of Kaingaroa began in 1918 plantings, and in 1948 a circular sawmill, built at Kaingaroa Headquarters, began sawing the old 1902 and 1912 planted shelterbelt radiata.

These were all very much piecemeal operations all patterned on indigenous logging practices of the day.

The clearfelling of radiata pine and Douglas fir, recognising the characteristics of exotic plantation logging, began with some form of consistency for regular delivery to both Waipa and Kaingaroa Sawmills in 1949-50.

Manpower, was in very short supply and men experienced in exotic logging virtually non-existent. The only man at Kaingaroa in 1950, experienced in overhead cable systems was the late T.S. Simpson who obtained his experience in Vancouver Island and Fraser Valley. Consequently the operation initially relied on experienced bushmen from indigenous operations particularly for supervision. These men, very experienced in the slow movement of very large piece sizes, had great difficulty in adapting to the fast movement of small piece sizes to achieve acceptable exotic log productivity.

## LIKEWISE WITH MACHINERY

Most machinery was adapted from successful experience in indigenous logging but was not suitable for exotic logging.

An obvious example of this was:

- . All logging blocks were snatchblocks with bronze bushings, blocks of tremendous strength but totally unsuitable for fast line speeds. Ball bearing or roller bearing blocks were not available in this country at that time.

Many of the new acquisitions of machinery were cast-off war surplus. These included logging trucks both on highway (GMC personnel carriers) and off highway Mack Tank transporters), D8 tractors, 2-drum Skagit haulers (built to raise and lower anti-submarine nets), etc.

Crane log loaders as they were purchased were all manufactured in Britain, not for the purpose of logloading but as excavators or dragline machines and so had to be modified.

In 1950 the powersaw was first introduced, but these were heavy and cumbersome. One-man saws arrived in 1952, but were not used in the felling operation until 1959. A trial in 1957, of felling with one-man saws caused an accident which resulted in a 2-year delay for their introduction for that purpose.

At the beginning of 1955 Kaingaroa Logging Company (KLC) came into being, drawing all its early expertise from ex-Forest Service personnel. This included management, planning, administration, supervision and the bushmen.

This new company showed the way to the NZ Forest Service by purchasing machinery and equipment custom built or suited to plantation exotic logging.

By 1956, both KLC and Forest Service were running effective harvesting operations using machinery and equipment largely suited to the operation and this continued for the remainder of the 1950s.

Pulpwood as an alternative to sawlogs was introduced into the operations in the mid-1950s, but at this stage piece size diameter did not go below 6 inches, so rather than increase production it had the effect of improving sawlog quality.

Of course, the search for improvement of methods and equipment did not stop in 1959. In 1959-60 such items as skidders, rubber-tyred front-end loaders, transmitters for hauler breaking out, double and treble log trailer units etc. had never been considered.

Strange as it may seem, production based on a log hauling unit, be it tractor or hauler did not increase to any significant extent over the 1950s, i.e. machine day production did not increase.

What did occur was that improved methods and machinery, reduced manpower requirement, so that man-hour production greatly increased in the 10 years. This, in a manpower starved situation, as this country was experiencing was most significant.

It is interesting to note that as machinery became more sophisticated, great strides were made in reducing manpower input, improving operator comfort, and safety but not in increasing production.

It is worthy of note that in 1950, apart from road vehicle brakes, there were no hydraulic systems on logging machinery. Only last year, I was advised at a LIRA Seminar that hydraulic systems caused over 30% of logging industry machine downtime.

Approximate gan production excluding delivery but including supervisor was as follows:

1950 Annual Production

Machine	No. of men	Volume
Hauler (Skyline)	14	28 000 m <sup>3</sup>
Tractor (D7)	11	35 000 m <sup>3</sup>

1960 Annual Production

Hauler (Skyline)	10	28 000 m <sup>3</sup>
Tractor (D7)	8	35 000 m <sup>3</sup>

By 1960 the era of adaption and compromise was practically over but the learning process continues to the present day.

