Paper (c)

SAWN TIMBER EXTRACTION

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Where it all began.

In 1974 Warwick Davis of Kerikeri imported a V.W. powered forest type mill from U.S.A.

Its ability to precision saw very large kauri logs was soon demonstrated but the supply of big kauris within existing road systems soon proved to be finite.

Scattered around Northland and Coromandel on very rugged ground are individuals and groups of large kauri which owe their survival - to the fact that they were considered to be too difficult to log by the old kauri bushmen.

Warwick Davis' familiarity with Pacific Northwest logging and his interest in kauri enabled him in 1977, to make a mental connection and come up with the idea of using a helicopter to position his mill in the bush and to extract the sawn timber from these isolated trees.

The mill produced flitches in dimensions up to $300 \times 100 \text{m}^3$ and had an output of up to 10m^3 /day. The timber was very precisely sawn and, being mostly clean heart kauri, found a ready market.

Advantage of the system were the production of precision sawn very high grade timber from trees previously considered to be unloggable.

Disadvantages from a forest management point of view were as follows:

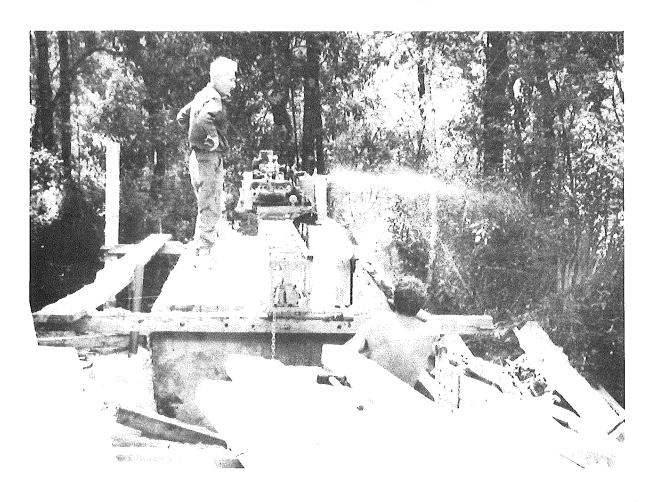
- The mill could only cut on a horizontally placed log. (Motor would not lubricate on steep ground). Positioning logs in a horizontal plane in the kind of country where kauri grows was often difficult and hazardous.
- 2. The mill 'brings back' each flitch as it is cut so you need a cleared area behind the log at least the length of the log. In a selection logging situation this can lead to quite noticeable clearings.
- 3. Log Supply Most state areas of mature kauri are tied up in

reserves so opportunities for state supplied logs are infrequent. Very few trees remain on private land.

4. A helicopter is needed to position the mill. It was also used to bring in a plywood hut and supplies for the workers. This two phase use of the helicopter is expensive.

Warwick Davis pioneered several current practices.

- 1. If you saw the timber in the bush you need only extract what's saleable.
- 2. You don't need a 'big lift' helicopter to log big trees.
- 3. Country previously considered too rugged became loggable.
- 4. Roading and hauling is not always fundamental to logging strategy.



Forest Mill sawing a large dead kauri in Puketi Forest (1977)