

TECHNICAL NOTES



Aerial harvesting on the West Coast - A note

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Aerial harvesting made its debut in New Zealand on a fully commercial and significant scale on the West Coast of New Zealand in 1993.

Despite initial difficulties culminating in a tragic and fatal accident, the operation has become firmly established as the prime harvesting tool in indigenous forestry.

While seemingly prohibitive to operate in economic terms to the lay person, the operation brings with it a previously unimagined flexibility and dramatically visible environmental benefits. While the machines and technology may change, aerial harvesting is here to stay and has the potential to be a specialist part of the exotic plantation manager's repertoire, believes Timberlands.

The reliability of the Russian machine currently being used by Timberlands has exceeded expectations. The secret is a matter of logistics - coordinating sufficient total work and ensuring high machine utilisation when in use.

Conditions of the contract with Timberlands require that there are two machines available for the operation, with one as a back up to ensure production rates are achieved to meet the company's obligations to its customers.

SPECIFICATIONS: MIL 17 and MIL 8 Helicopters

Engines (2 of them): 1900 horsepower (MIL 17), 2200 horsepower (MIL 8)

Total overall length: 25.3 metres Height: 4.8 metres Rotor Span: 21.3 metres

Maximum Take-off Weight: 12,000 kg

Internal Payload: 4000 kg External Payload: 5000 kg Cruise Speed: 240 km/hr Altitude: 6700 metres

Average Haul Distance: 0.4-1.8 km Production: 600-1100 tonnes per day

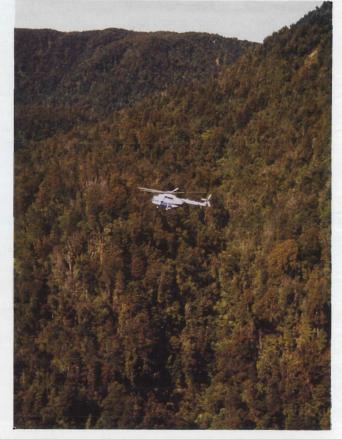
Helicopter logging can be especially useful for:

- exotic/indigenous selection harvesting;
- meeting an export order shortfall;
- salvaging high value logs after a wind-
- recovering timber from erosion prone areas;
- avoiding prolonged consent or access negotiations where forest must be accessed through sensitive areas;
- careful harvesting of important visual or streamside management zones; or
- boosting production after prolonged adverse weather.

Timberlands' operation has proved to be both efficient and economic. Environmental benefits are obvious with minimum impact on soil, water and scenic values. The operation allows complete selection harvesting; trees can be extracted but the integrity of the forest stand



Traditional clearfelling by conventional operations in preparation for Special Purpose Species Plantings in Ianthe, South Westland. Photo: Liz Solari.



An aerial harvested face; a forest can be harvested and yet still retain the visual appearance of a normal forest. Photo: Liz Solari