

WINDTHROW SALVAGE IN KAINGAROA FOREST

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DAMAGE ASSESSMENT:

The estimated volume for areas in Kaingaroa damaged by the Easter storm were:

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| P. RADIATA (OLD CROP) | 1,404,516 |
| P. RADIATA (YOUNG CROP) | 113,661 |
| P. CONTORTA | 60,597 |
| P. PONDEROSA | 5,785 |
| P. NIGRA | 25,086 |
| P. STROBUS | 247,707 |
| PS.MENZIESII | <u>25,292</u> |
| TOTAL | <u>1,882,664</u> |

Besides this volume which is recoverable there was also 139,000m³ of the above species not readily recoverable.

SALVAGE OF YOUNG CROP P.RADIATA:

Salvage commenced immediately after Easter in all compartments where current thinning operations were being carried out by our Forest Service contractors. In previously thinned areas trees were uprooted with minimal breakage to the residual crop but in some areas by-passed for production thinning severe breakage occurred.

All skids previously used for thinning were well sited for all salvage operations and new skid and road formation was only necessary in unthinned areas.

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| The existing standard format of 1 | 76 - 100 kW | SKIDDER |
| 1 | 66 - 96kW | STACKER |
| 5 | MEN | |

were maintained and proved satisfactory for the salvage of all Young Crop P.radiata.

The salvage of the residual crop from thinned stands increased the piece size considerably compared to the extraction of thinned stems.

In a normal thinning operation we could expect to produce 25% of the volume in export "B" logs and the remaining 75% in pulp. Salvage of the residual crop increased the sawlog content up to 60%. Although extra time was allowed for breaking out there was a significant decrease in the logging cost for salvage compared to production thinning on account of the larger piece size.

Salvage should be completed in the Northern Boundary Compartments by Christmas and since many trees still retain part of their rooting system in the ground they should still produce logs suitable for export and local sales free from sapstain and insect attack.

Contract gangs have recently been moved into unthinned stands of a younger age class in the southern end of the forest where the piece is considerably smaller and therefore increasing the logging cost.

SALVAGE OF D. FIR:

Two compartments were badly damaged in the Otamatoa Block. These had been previously salvaged for windblow and will probably now be brought forward for clearfelling. Isolated trees were uprooted on the felling face where the gangs were working.

SALVAGE OF OLD CROP P. RADIATA:

Access roading commenced after Easter and the gangs moved in after completing the salvage of minor damage in their current areas.

Eighty-five per cent of the area allocated to our Forest Service contractors ranged from flat to undulating suitable for their equipment comprising -

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| 1 | 101 - 150kW | SKIDDER |
| 1 | 91 - 120kW | STACKER |
| 8 | | MEN |

plus one double unit crew with a track machine. We were aware from the start that six men would have been sufficient in the single unit crews but had informed our contractors that we would not reduce the number of men below their current gang complement.

One contract gang thinning D.fir with a F.M.C. was moved into salvage a steep sided gully.

The normal lean of trees in Kaingaroa is to the East but with the gale from the South East the initial landings were formed along the eastern side of the compartments to enable better hauling. Following the establishment of the gangs on their first landings the plan was to concentrate on forward roading to enable us to move our Young Crop thinning contractors into the area after their completion of the severely damaged Young Crop stands. These smaller machines had no difficulty in hauling the larger trees since the piece size in this part of the forest is well below the average for Old Crop. Stamped tracks were formed where necessary to assist the skidders.

Road and skid formation increased by up to 30%. Extra skids were formed to allow for butt hauling and to reduce the need to turn the drag after breaking out. The straight haul eliminated breakage and enabled the utilisation of the heads for roundwood.