

forest trees, could be economically viable in New Zealand radiata pine clearfelling and would reduce soil disturbance and provide improved debris-flow capturing capabilities. It would also likely be seen as good practice by the public and regulatory authorities alike.

But a move to these systems would require a step change in harvesting practice. Using intermediate supports to enable productive gully to ridge extraction and avoid damage to riparian areas would require:

- Relaxing the New Zealand requirement for intermediate support trees to be topped (reducing rigging delays) or developing mobile intermediate supports for quick set up
- The use of skyline carriages capable of operating over intermediate supports
- The development of worker skills and training systems to rig intermediate supports
- Low tension skyline systems that overcome the lower payload of the carriage/intermediate support system and improve productivity.

A logical follow-up to the current Steepland Harvesting Programme could be a forest engineering programme aimed at devising best practice guidance for the industry on how to cost-effectively extract wood away from riparian management zones and wetlands, and avoid hauler scalping of hillsides and soil compaction by ground-based machines.

If, as responsible forest managers and stewards of the plantation forest estate for future generations, the members of the New Zealand Institute of Forestry believe there is a requirement to develop systems to efficiently harvest in a way that minimises the impact of our management practices on the environment, then it follows that a fully funded and resourced research and development programme must be implemented. Surely a larger share of the Forest Grower Levy should be mobilised to demonstrate the sustainability of our industry and ensure our licence to operate is recognised and valued by the community.

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Letter to the editor

Genetics, tree improvements and PSP

John Groome, NZIF Honorary Member, Canterbury

Your very informative piece fails to relate the important political, not genetic, fact about the *Pinus ponderosa* planted along the Low Level Road and elsewhere in the 1930s depression.

Trade then, as now, was of more importance than genetics. New Zealand had to buy seed within the British Commonwealth, not the United States. Some did get through from other countries and the very promising

var. *P. ponderosa* from California (Bull Pine) did get in. Very attractive specimens of these can still be seen in Canterbury and elsewhere. The state, however, had to buy the much inferior var. *Scopolorum* from the dry forestry lands near Kamloops in British Columbia.

These grew on the Kaingaroa and Karioi frost flats, but we must have lost millions of cubic metres due to this error – not by foresters, but by politicians.