

Treefarmer

Treefarmer is a free web-based computer tool to assist landowners with woodlot planting and harvesting decisions.



Planning a woodlot



Improving harvest awareness



OUTPUTS FROM TREEFARMER

1. Property boundaries
2. Legal description
3. Powerlines
4. Waterways
5. Quarries and rock pits
6. Woodlot area
7. Productivity of five commercial forestry species
8. Indicative costs of establishment
9. Indicative wood and carbon yields
10. Planning and costs of roading
11. Planning and costs of skids
12. Log and load costs by woodlot
13. Summer logging impact
14. Costs of log transport to markets
15. Print or Save-to-file
16. A checklist of additional requirements for; site preparation, establishment, silviculture, and harvest planning, e.g., environmental compliance, Health & Safety, harvesting and marketing options.

WOODLOT PLANNING

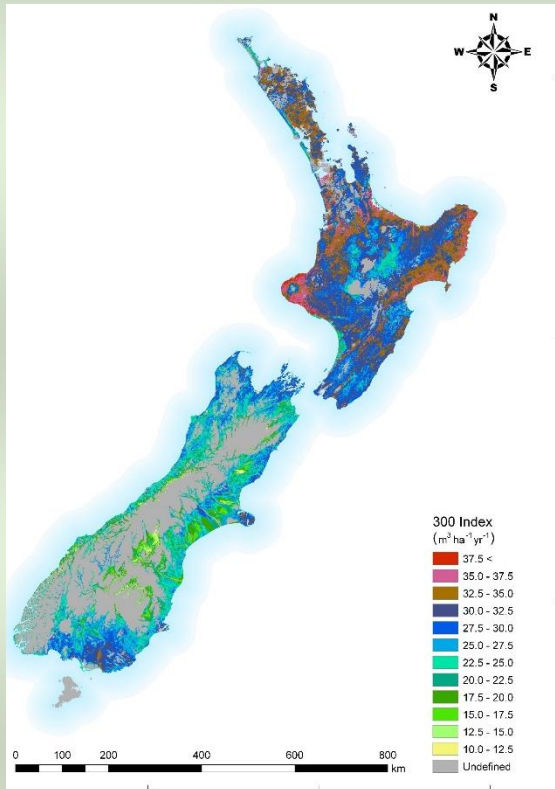


Multiple woodlots can be mapped on your property and the planting of five forestry species simulated. Choose from three tending regimes to give costs and yields (wood and carbon) for selected harvest age.

Site preparation costs account for the effects of existing vegetation cover and ground slope. Tending regime (pruning & thinning) costs are influenced by species understory hinderance and slope.

UNDERPINNING LAYERS

The Tree Planting module uses national surfaces of tree crop productivity from Scion. The following is an example developed for Radiata pine.



300 Index = average volume growth/year at age 30 for 300 stems/ha.

Other species that have been included are:

- Coast Redwood
- Cupressus lusitanica
- Douglas fir
- Eucalyptus nitens

TREE HARVEST



Multiple woodlots can be mapped, and the harvest planning simulated by drawing woodlot boundaries, skid locations and road scenarios.

Costs are affected by ground slope, summer logging, distance to available road metal, and distances to markets volume.

The slope of the road is indicated by a colour code to identify where the slope may be too steep and requires realignment by editing the line.

Costs are reported in tables and new scenarios can be quickly tested.

Total Estimated Costs		
Cost Description	Cost per tonne	Cost per hectare
Log & Load Costs	\$37	\$24,313
Access Road Costs	\$13	\$8,439
Transport Costs	\$16	\$10,480
Skid Costs	\$1	\$858
Management & Other	\$7	\$4,550
Note: Other includes Shifting, Weighbridge, Compliance & Levy Costs		
Total	\$75	\$48,640

- Treefarmer is not aimed at providing operational plans nor replacing any need to engage harvesting & marketing agents or any assistance from professional forestry consultants or harvest planners
- Treefarmer has been developed with Forest Growers Levy funds for free use by all New Zealand Small Scale Forest Growers. This web tool is intended to provide knowledge and awareness of forest operations and improve forest investment outcomes. Results provide guidance and are not to be taken as financial advice.

Access to the tool is available from Forest Growers Research at: <https://treefarmer.fgr.nz/>

Technical support is provided by Graham West Land Use Solutions at <mailto:westlanduse@gmail.com>