

Thinning old man poplars

In winter 2009 work was carried out at a property on State Highway 1, in the Rangitikei District. The work involved thinning the Old Man Poplars (OMP) that had not been managed over their lifespan. The trees were starting to cause problems on the farm by falling and making it unsafe for stock and farm personnel.

The plan

We discussed the problem with the landowner and one option was to fell all the OMP and develop a replanting plan for the future. But as there were a lot of OMP, felling them all at once would create a lot of mess on the ground, hinder effective grazing management for the stock, and make the land vulnerable to erosion, which is why the trees were planted in the first place.

So the plan we came up with was to fell the trees in stages. The first stage involved going through and thinning the trees by 30-50% with every one in two or three trees to be felled and limbed. Limbing up the trees ensures the mass left on the ground is less of a problem as it breaks down and rots faster.



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Limitations

Due to the nature of job there were a few limitations that needed to be identified with the tree fellers in order to make sure the job was done correctly and in a safe manner.

The limitations and hazards of the job were the:

- terrain: it was very hard to limb trees up safely with a chainsaw when the trees lie on a hillside
- poisoned trees: branches from the top had the potential to fall, and were sometimes difficult to control when removing, as there was no weight in the top
- amount of trees: made it hard to select which trees to drop to avoid hang-ups so sometimes had to blanket fell areas, and
- mess on ground: fallen trees leave a massive mess on the ground.

Information collected

Once the job was completed the following information was collected:

- it took approximately 60 man hours, at \$41.80 an hour, to thin approximately 50 - 60ha of trees
- the diameter of the tree trunks ranged in size from 30-110cm, the average was 80 - 90cm
- the time taken to fell a tree was two minutes, and
- the time taken to limb a felled tree was 10-15 minutes.

Recommendations for future jobs involving Old Man Poplars

Jobs are to be carried out by qualified chainsaw operators due to the nature of the job and the hazards involved. Operators must be aware of OSH health and safety regulations.

In order to maintain ground stability trees should be thinned over time followed by a replanting programme. If all trees are felled a replant of poles should be immediate.

Trees that are felled should be limbed up where possible to minimize the mess on the ground and to speed up the break down process. If possible a machine can be used to pile up slash, and burn on site. If burning is to occur off-site, not on production land or if it may cause objectionable or offensive odour, dust or water vapour beyond the property boundary, then contact the consents team at Horizons Regional Council to see if a resource consent is required.

A rotational felling and replanting system, at say 10 year intervals, will ensure that the trees don't reach maturity all at once.

The careful selection of appropriate varieties for specific sites can reduce problems at maturity



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Felling of a poisoned poplar

More information

More information about Old Man Poplar management is available free of charge from your local Horizons Regional Council environmental management officer soils by calling 0508 800 800.

The publication "Growing Poplar and Willow Trees on Farms" is available online by going to <http://www.maf.govt.nz> and typing "growing poplar and willow trees" into the "search MAF" box.

You can download "A Guide to Tree Felling and Cross Cutting" at <http://www.osh.dol.govt.nz/order/catalogue/pdf/treefell.pdf>.