

Management of 'old man' poplars

LandVision have been on three or four properties lately where there are significant areas of 'old man' poplars planted some twenty odd years ago for erosion control. And as we ride through them, the same question has come up from each farmer, "what on earth can I do with these?"

These old man poplars were planted in a time when Catchment Boards heavily subsidized erosion control plantings and as a consequence were planted by the tens of thousands. More often than not only 5-10% survived the establishment phase and this was often through good luck than good management.

Now, some twenty years later, there is no longer the erosion problem of the hill slope slipping away, but a bigger problem of poplars splitting or blowing over. This alone is enough to discourage people from ever planting another pople.



Poplars are like a fence. Once they are planted the job is not over. They still require periodic maintenance, in terms of form pruning, to ensure their life expectancy is 40-50 years rather than 20-25 years without any maintenance. If you consider 40-50 years life expectancy too short, then alternative species such as oaks, maples, etc must be considered. The difficulty with alternative species is their management under a grazing environment during the first few years.

Old and very large trees are potentially dangerous to stock and landowners as there is a significant risk of large limbs breaking off in high winds or trees being uprooted in wet, windy conditions. If you have 'old man poplars' that are in this category there are several options available. These include pollarding, poisoning or removal by cutting down.

Pollarding is where the tree is cut down at a level above grazing height. New shoots sprout from the top of the stump (often a couple of metres above the ground). The removed branches, leaves etc make excellent stock feed, especially during a drought. The advantages of this method are that the tree re-grows and retains root holding ability. The disadvantages includes the difficulty of cutting an often very large tree down some two metres off the ground. Initially there is also a reduction in root volume whilst the branches re-grow. Also the regrowth is often a multitude of shoots that need to be managed.

Poplars can be poisoned standing by injecting herbicide into the cambian layer every 15-20 cm around the trunk of the tree. The advantages of this method is that there is no danger in using a chainsaw. The tree will die slowly and if combined with re-establishing new plantings it can be quite successful. The disadvantages are that once the tree has died the tree is prone to losing large branches during periods of strong winds. This can



be dangerous to both landowners and humans. It is also a method that is not suited to around buildings, yards and fences.

The third option is to cut the tree down at ground level across the slope. The advantage of this method is that the tree is down and once down it will not fall any further. The majority of the branches etc will decay within a two-three years. If felled when in full leaf you will get a bigger bang with greater branch breakage. Stock will also eat the leaves and small branches. The main disadvantage is the mess of several years. You can speed up the process of decay if cut up into smaller sections.

The important thing to remember is that most of these old man poplars were planted for erosion control. If you remove them one way or another they need to be replaced. And for the next rotation they need to be managed to enhance the life expectancy.

For those of you that have been recently discouraged by the problems associated from plantings some twenty or more years ago, you should be encouraged by advancements that made over this period. These include improved clones available for planting, clones that have been specifically bred for different sites, and a better understanding on how to manage poplars from establishment through to maturity.

AgResearch is about to release a book titled "Growing poplar and willow trees on farms." This is an excellent book that provides guidelines for establishing and managing poplars and willows. Within the next month or two most regional councils in the lower North Island will have copies.

Want to know more information contact either Sarah Dudin or Lachie Grant at LandVision@gmail.com or visit our website www.landvision.net.nz.