

Poplar and willow poles for soil conservation

Poplars and willows are suitable trees to plant on erosion-prone hill sides. Their extensive root systems bind and hold soil in place.

An ability to grow from unrooted 3 metre poles allows them to be planted amongst grazing sheep which cannot reach the new growth at the top of the pole.

Successful establishment of poles requires careful handling, storage, siting, planting and post planting management.

This pamphlet tells you how to successfully plant poplar and willow poles on erosion-prone hills.

Poplar

Willow

poplar



willow



Timing

July and August are the recommended months for planting poplars and willows.

Transporting poles

- ▶ Poles are supplied in bundles of five.
- ▶ Care must be taken to avoid damaging or bruising the bark during loading and unloading as this can allow disease to enter the stem of the pole.
- ▶ Use straps or ropes when securing loads of poles.

Storage

Soaking poles in fresh water for at least two weeks before planting assists future root and shoot growth and increases survival rates.

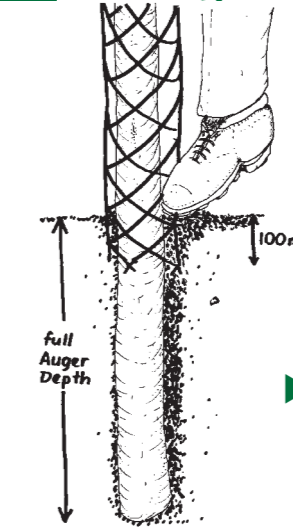
- ▶ Place bundles of poles into fresh water to a depth of 1 metre. If placed in a creek the poles should be secured in case of flooding.
- ▶ If soaking is delayed more than two or three days after harvesting, the butt of the pole can seal and prevent water uptake. If this happens, make a diagonal cut at the bottom of the pole with an axe before soaking.
- ▶ Prevent stock gaining access to stored poles.

Siting poles

- ▶ Poplars and willows do not tolerate summer drought.
- ▶ Avoid dry knobs or faces. Plant poles in small depressions or channels that are likely to collect moisture.
- ▶ Avoid planting on areas exposed to strong or salt laden winds.
- ▶ Avoid planting on streambanks in a position which may divert flood flows.
- ▶ Avoid planting on stock tracks or camp sites.



Fitting netlon sleeves



Netlon sleeves prevent stock damaging the bark of the pole.

The sleeves are fitted before planting.

Slide the sleeve onto the pole from the butt end.

▶ Sleeves may be secured to the pole with fencing staples.

Fitting possum plates

The new growth of poplars and willow poles is prone to possum damage. It is advisable to fit Possum Plates around the top of the netlon sleeve if your area is prone to possums. A separate brochure explains how to do this.



Planting

- ▶ Use a post hole borer to make a planting hole with a 100mm diameter auger to the full depth of the auger.
- ▶ Force the prepared pole firmly into the bottom and to one side of the hole to achieve firm soil contact at the butt.
- ▶ Ensure the netlon sleeve is in the hole to a depth of 100 mm.
- ▶ Backfill the hole with soil and ram firmly. The bottom of the sleeve is now buried, preventing it from being rubbed up by stock.
- ▶ Be careful not to damage the bark of the pole when ramming.

Willow



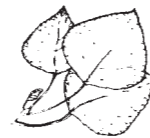
Removing competing vegetation

Surrounding pasture competes strongly with newly planted poles for soil moisture. It is essential to kill the pasture around the pole to ensure its survival and vigour. Apply the following herbicide mix before the end of August.



In 15 litres of water (knapsack) mix 150mls of glyphosate and 75mls of simazine. Make a 1 metre diameter spot around the base of each pole. Each spot should receive a five second application of spray mix.

Poplar



Maintenance

Re-ramming

In late Spring, after the soil begins to dry out, re-ram the poles as necessary. At the same time, secure any protective sleeves that have become loose.

Form pruning

Poles often grow multiple leaders which create a weakness and may lead to wind damage. When the pole is three or four years old, selectively cut out any multiple leaders to leave a single vigorous stem.

Good planting!!



This pamphlet has been produced by Environment Canterbury to promote sustainable land management practices. For further copies please contact Customer Services, Christchurch, ph. (03) 365 3828 or

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