

# Weeds – managing the competition.

Weed control is essential to protect your investment and the future profits from tree plantings!



Fact Sheet 4

Weeds - managing the competition



# **Weed control**

Weeds will aggressively compete with your trees for water, nutrients and light. They can also contribute to increased frost damage, browsing susceptibility, fungal diseases and insect attack.

Weeds can affect the growth of the trees and reduce the effectiveness of shelterbelts or amenity plantings around roads, reserves and creeks.

# **Develop a strategy**

A good weed strategy will allow the planted trees to grow as quickly as possible so they occupy the site, rather than the weeds occupying the site. There are two methods of weed control:

#### NON-CHEMICAL

The following methods can provide a short-term solution, however require careful implementation and monitoring to be successful.

## Burning -

Often used to control bracken and gorse. Be aware that fire can encourage seed germination or sprouting from underground rhizomes, so burning could increase the amount and variety of weeds in the future.

## Slashing -

Good for access and to help reduce fire risk in older plantations. As an initial form of weed control, it cuts the weeds back but the roots can still survive, providing competition for water and nutrients.

# Mulching -

Effective once the weeds have been suppressed or removed initially. Cultivation can be used to remove woody weeds. Do a second cultivation in spring to get on top of any new invasion weeds on the site. Don't apply fresh manure directly to plantations.

# Grazing -

Appropriate before chemical weed control in grassy areas. Well-managed grazing is effective in controlling pasture weeds in strips between tree rows once the trees are established. Grazing needs to be carefully managed. If animals graze on wet soil they can cause damage to the roots. Cattle need to be monitored to ensure they don't eat the seedlings or rub against the trees.



#### **CHEMICAL**

If you plan well, a chemical weed control regimen can be a low-cost effective method. There are three categories of agriculture chemicals:

# 1. Translocated or systemic chemicals

Sometimes referred to as knockdown herbicides, the liquid formula is absorbed (usually through spraying) by the foliage and translocated through the plant.

#### 2. Root-absorbed chemicals

Often referred to as residual herbicides, these chemicals are usually applied directly to the ground as liquid formulations or dry granules. They require moist soil and can remain in the ground for long periods.

#### 3. Germination inhibitors

Work best if applied to bare moist soil so that the active ingredient can bind to the soil particles in the top few centimetres of soil. They kill seedlings as they germinate and remain active for 3-6 months.

NOTE: It's crucial to use the right chemical for the right job. Labels on chemicals are legal documents and must be followed exactly. Seek professional advice before embarking on a weed control strategy. Ensure you are adhering to the relevant Chemical Acts and Regulations.

<u>Go here</u> for a full list of herbicides registered for forestry use in Tasmania.

# **SPECIES TIPS**

**Eucalypts** are sensitive to grass competition. Ensure there is a weed-free strip of one metre in width around young seedlings. This should be maintained until the canopy suppresses the weed growth

Pine plantations may only need a one-metre diameter spot around the seedling in the first year. Strip application could be necessary in the second year where aggressive grasses may have grown throughout the year

# Helpful hints for weed control:

- Check out native forest sites before clearing your land so you can anticipate the weed spectrum that will germinate in spring. Keep in mind that wattle seed can lie dormant and then germinate when there is soil disturbance or burning
- Spray bracken areas in autumn before the first frosts. Leave undisturbed for at least four weeks (ideally until the spring). Slash any re-sprouting in the spring, allow a new canopy and spray again
- If you plan to cultivate the entire plantation area, it's best to apply the herbicide before cultivation.
  Apply residual herbicide to bare ground for longer control
- Cultivate the soil in strips to achieve a fine tilth. Cloddy soils or turf tods will make managing weeds more difficult
- On ex-pasture sites, concentrate the weed control on cultivated strips about one-metre wide. Leave the area in between strips undisturbed to help with erosion control, prevent invasion of problem weeds and provide fodder for grazing
- Apply herbicides before the weeds go to seed



# Planting the seedlings

Now that you have prepared the site and have a solid weed control strategy, it's time to get planting. Schedule the planting in late winter to mid spring to avoid the risk of drought stress or severe frosts.

#### **CHOOSING YOUR STOCK**

**Seedlings** should be grown from genetically improved seed collected from a seed orchard, as this will give you a better quality tree with a uniform growth rate

**Cuttings** from the same mother tree will be the most uniform in growth and size at harvest. Be aware that as there is little genetic variability amongst cuttings, there is a risk of greater damage to the plantation following a single stress (frost, insects, disease) if the cuttings are susceptible

**Potted/container stock** is supplied in paper or plastic pots or most commonly in trays. Check that the roots are not bound within the pot or container – there should be no spiralling of roots

**Open-rooted stock** has been raised in nursery beds. The stock is lifted from the beds just before delivery. These plants tend to be larger than potted stock as they have been growing in beds for longer. **Go here** for more information on the attributes of desirable open-rooted planting stock

# Good to know

- Hardening can increase the resistance of your stock to frost, drought and animal browsing
- The nursery can harden stock by exposing it to cold nights
- Check your stock has not been exposed to dry conditions or been squashed during delivery
- Plant stock as soon as possible. If storage is required ensure it is in cool moist conditions. Avoid temperatures greater than 4 degrees as this can cause de-hardening
- Don't expose seedlings to full sunlight and avoid exposure to wind
- Avoid plastic bags for storage. If the open-rooted stock cannot be planted for at least three days, heel into moist loose soil without separating the plants



# **Get planting**

It is essential for the survival and growth of your trees to get the planting right. Tractor-mounted planting machines are suited to well-prepared expasture sites or you can use hand-held machines, such as a Pottiputki. Custom-made planting spades are effective and suited to the scale of farm forestry. Make sure the planting hole accommodates the total root volume without distorting it in any way.

<u>Go here</u> for a comprehensive guide to planting open-rooted seedlings using the positive pull method.



# **Next steps**



# Arrange an appointment

Arrange an appointment with a private forester to talk about what you want to achieve from growing trees on your property. See if a consultant can come and assess your land and find out what is possible

contact@treealliance.com.au



# Call the helpline

Call the helpline with any questions

Tel: 1300 661 009



# Join the online community

Join our private Facebook group, the Growing the Future Online Community. Find out what other farmers are doing, chat to an expert, ask questions and share ideas. https://www.facebook.com/groups/596397397623294



# Hobart

30 Patrick Street Hobart 7000

#### Launceston

State Government Offices 171 Westbury Road Prospect 7250 PO Box 180 Kings Meadows 7249

#### Burnie

State Growth Offices The Harris Building Level 2, 49 Cattley Street PO Box 68 Burnie 7320

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