

Planning your revegetation

Set your aims first

Be honest about what you want

What do I want it to look like in 10 years?

What do I want to do with it?

There is a tendency to plan according to what funding is available. This is set up for failure if your own objectives do not align with the funders.

What species?

We have come a long way and recognise the role of understory plants.

Understory shrubs are important:

For biodiversity, understory species produce the cover for smaller birds and animals, broaden the number of food resources available in a patch and therefore increase the number of species that use them.

Too many trees: tend to start to stunt each other growth, bare out the ground and can actually cause new erosion. For stock shelter, can end up with wind tunnel effect and little shelter benefit

What density?

As a guide:

- Woodland - 400-450 plants/ha, 80% understory 20% trees
- Forests- 600 plants/ha, 70% understory 30% trees

Is it a tree shelter belt with fence removed after establishment?

Choose just trees and tall shrubs.

These types of plantings are only considered for public investment under very specific circumstances .

For example critical links between habitats for possums and gliders may only be a way to get from A to B , and understorey is not important.



Is it an area you will graze, but manage sympathetically to maintain native vegetation?

Make it big enough to manage grazing easily, gates at each end. Choose taller, fast growing trees and understory but don't bother yourself with smaller, sensitive shrubs. Can be a win-win for the public-private investment in the right part of the landscape—creates valuable habitat **and** can be a “living haystack”



Is it a biodiversity or aesthetic planting that you will hardly ever graze?

Consider the full range of species that can be planted —think about the fast growing understory in the first place and adding other species later when the grass competition in the ground layer has been overcome by the trees and taller shrubs.

Consider broad scale site spraying of perennial pasture species if the area is flat, which will reduce the dominance of phalaris down the track. Baring off some ground will also allow natural regeneration to occur if there are old remnant trees on site.

This provides high public benefit if in the right part of the landscape.



Revegetation—planning

SIZE

- Bigger is always better for biodiversity! And a lot of the time it's better for stock shelter also
- Bigger sites are easier to keep strained and stock proof, and easier to manage with crash grazing and weed control because you can get in it easier and stock aren't as confined so less likely to damage fences
- To be a patch of habitat for most animals to breed in, needs to be 100m wide or a block, but small and narrower sites can be good for providing connectivity and for some species to live in
- For windbreaks, wind protection is around 10 times the height, and length of breaks should be at least 12 times the height to maximise the benefits

SHAPE

- Blocks are a much better investment - lower cost per hectare for the benefit achieved
- Blocks are better for biodiversity - less edge effect - and for the same reason, better for off-shears or bad weather holding paddocks



WHERE?



For maximum biodiversity benefit

- In gullies or flat areas—productive agricultural land also productive biodiversity land!
- Next to or connecting other plantings or existing vegetation (make patches bigger, connect patches)
- Include large old trees and fallen timber for habitat
- Corners and blocks in paddocks rather than, or as well as, narrow strips helps discourage dominance by noisy miners

For maximum shelter benefits

- Length of breaks should be 12 times the height for maximum benefit
- Right angles to the prevailing wind in flat areas, on the contour in hilly areas
- Mix of species to minimise wind tunnelling effect under mature trees and permeable so not to create turbulence on the downwind side



For maximum benefit for control of water

- Tree planting to intercept water can only help if the water source is local runoff or a local groundwater system
- In granitic landscapes systems are *generally* localised and responsive and you may get an effect if in sedimentary landscapes (shale) local recharge is not necessarily linked to local discharge—seek advice if this is your goal!

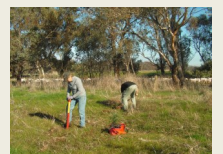
WHAT METHOD OF REVEGETATION?



Direct seeding— Works best in lower fertility sites with high native groundcover and or where there is some vegetation already and you just need to put some species back. The site needs to be accessible for direct seeder towed behind a farm ute (not too steep, big enough for a 4WD & trailer turning circle)



Tubestock—Works best in areas that can be ripped and sprayed to prepare. Planting with a shovel or specialised planting tool. Holbrook Landcare has pottaputkkis (shown on right) available for members to borrow. Can be contract planted by some nurseries.



Natural Regeneration

This is an option where there is existing trees. Sometimes ripping and spraying the site can help trigger the regeneration event, even if you don't plant anything