



How to grow bulokes.. from scratch.

Many people in the Wimmera have been trying to replace some of the 97% of Bulokes that have been lost over the past 200 years. What they have found is that they are notoriously tricky to establish and that like any good crop, there are important rules to follow to achieve success.

Andrew Bradey is the President of the Kowree Tree Farm Group. He has spent a lot of time fine-tuning the art of successful buloke establishment.

Red-tailed Black-Cockatoos are just one of the many species that rely on buloke as part of their diet or habitat. For the Red tails it takes 100 years for the trees to produce enough of a feed to be of real value. With 97% of buloke already gone we have to replace as much as possible, as soon as possible! When we asked Andrew to tell us his 'secrets' of how to establish this difficult to grow tree, this is what he told us:

So, you want to try to establish Bulokes? Are you mad? If the answer to both of these is yes, read on.

Every year tens of thousands of Bulokes are established by nurseries in and around the Wimmera. Bulokes are a critical element of the Wimmera landscape, are valuable habitat for a range of rare species and are mostly old and massively depleted in numbers. They deserve to be a popular species for farm plantings, however it seems many of these nursery seedlings are bought, presumably planted and then most vanish.

In the south west Wimmera, The Kowree Farm Tree Group has been successfully establishing Buloke plantations for ten years through both drought and flood and this is our recipe

Site selection

Bulokes are an extremely slow growing species. This Buloke establishment business will be a long project. From the time you plant seedlings until the trees reach maturity the farm on which you plant these trees will probably change hands five times. There will be at least two bushfires, maybe a flood. The fence you build will have rotted away. The climate will be hotter and probably drier.

So choose a site as close as possible or even amongst existing scattered mature trees (as long as they are not too dense; that would reduce moisture and light), and preferably, has permanent protection such as a covenant or heritage agreement.

Mark the site clearly as a conservation area to prevent others from wrecking it; a sign is good.

Establishment method.

There are four methods to establish bulokes: plant seedlings; natural regeneration from seed; natural regeneration from root suckers and direct seeding. We have never had great success with direct seeding but have consistent, moderate success with seedlings and natural regeneration from seed and suckers.

If you plant seedlings near existing Bulokes, your activities there may also stimulate regeneration from both roots and seed. Be sure to plant outside the canopy of existing trees. The combination of planting of seedlings and encouraging natural regeneration should result in reasonably consistent, successful outcomes. Also, if over your 100 year project there is a fire or other major damage, a site containing mature trees may be better able to repair itself.

Fencing

Bulokes are highly palatable feed for livestock! This is why you'll never see buloke regeneration in a grazed paddock. Because bulokes are slow-growing, you'll need to exclude all grazing animals for a long time: rabbits and hares for at least 2 years (use tree guards), sheep for 10 years, cattle and goats for at least 25 years and avoid localities where kangaroos might be a problem (especially in the first five years). Build a very robust fence and individually guard all seedlings.



Ripping

Deep rip planting lines to a depth of at least half a metre when the soil is moist, but not yet saturated (normally around May or early June). The aim of ripping is to create lateral cracking of the soil which attracts moisture and hastens root penetration. After ripping, flatten the rip-lines with the wheel of a light vehicle. Make rip-lines 5 metres apart.



Weed control

Our aim here is to control or avoid competition from other vegetation. Completely control ALL vegetation within one metre of the seedling

for two years. Do not plant within 10 m of shrubs or within 25 m of mature trees. This last factor will also play an important role in site selection.

Weed control is the best way to conserve soil moisture and prevent your seedlings from dying of thirst. Spray 2 m-wide bands over the rip-lines a couple of weeks after ripping (June) with a knock-down herbicide. Then 4 to 8 weeks later, re-spray (July to August) with a knockdown and a residual herbicide mix.

Seedlings

Because Bulokes are such a slow growing species, avoid planting them in mixes with other tree species. This also helps ensure that aggressive noisy miners don't take advantage of your plantation—pure buloke woodland is the best for most small woodland birds.

Buy well established, robust seedlings. Foliage must be dark green, well branched and at least 10 to 15 cm tall. There needs to be good root development; the root ball should not crumble when removed from the pot.

Plant seedlings into the prepared, weed-free site in winter to early spring (up to mid-September in a wet year). Make sure there is good root to soil contact. In very dry years watering may be necessary at planting and possibly again later. Robust tree guards are essential to protect young seedlings from birds, hares, rabbits and kangaroos.

Seedling spacing along rip-lines: 5 metres. Bulokes are a grassy woodland species, they need plenty of space. Not all will survive, so this density will eventually thin out to that of natural woodland.

After care.

Watch out for stray grazing animals (sheep, cattle, goats, deer, rabbits, kangaroos, snails, grasshoppers etc) and control them as soon as you find them (if you can).

Weeds should be controlled for two years. For small sites, hand spray with herbicide each winter. Put dye in the mix, so that you can spray accurately and avoid killing the Buloke seedlings.

Larger sites can be over-sprayed (that is, you can spray over the top of the seedlings): 0.5L/ha glyphosate 450 can be used in winter only; **ONLY IF YOU CAN CONFIDENTLY CALIBRATE YOUR**

SPRAYER. IF NOT, DON'T USE THIS TECHNIQUE. Done properly, this will control most weeds without damaging the Buloke seedlings

Conclusion

If you follow this recipe you should get pretty good, consistent results, and be well on your way to replacing some of the buloke habitat the region has lost. Bulokes are harder and more expensive to establish than other local native species, but the effort is extremely rewarding. Although it will be a long time before Red-tails feed in your new trees, it won't take long before smaller birds make the plantation their home.. In 3 to 5 years they will provide good shelter and some habitat for small birds and animals and after that continue to improve for the next couple of centuries.

What other job can you do in life that will still be improving in two centuries time?
Are you mad enough? I hope so.



A great result-10yo planted Bulokes: about 8m high