

# Guide to native tree planting on the mid-north coast of NSW

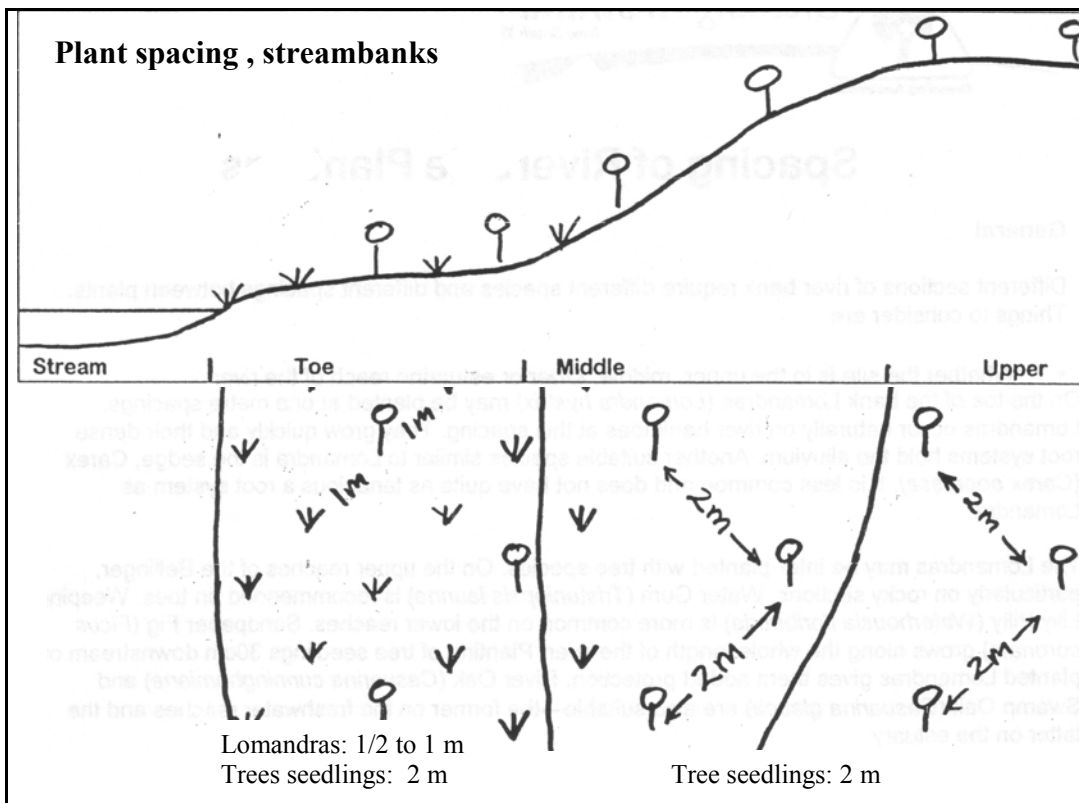
► Site design ► Site preparation ► Planting method ► Plant protection

**Introduction:** The subtropical climate is one of summer rains with springs usually dry and rainfall unreliable in the other seasons. Temperatures can reach to the high 40's during summer and frosts occur in the winter months (to - 8 ° at Dorrigo).



Soil moisture, follow-up rain and temperatures are all important factors to consider in the timing of tree planting, and local experience has shown that February / March are the best months for planting. Young trees can take advantage of soil moisture following rain, and high temperatures are not as prolonged and stressful for young foliage at this time of the year. As well, tree seedlings have sufficient time to establish strong enough root systems to survive the following winter. In the Bellingen valley and on the Dorrigo Plateau, March is the only month with very reliable rainfall.

**Design:** The most useful principle in planting for restoration is to aim at getting 'control' of the site as quickly as possible. This reduces requirements for weeding and maintenance and achieves the desired outcome sooner rather than later. While trees may be planted closer than their eventual mature size would suggest, this principle achieves shading of the ground layer and thus reduces grass growth. The trees will give each other some protection from sun, wind and cold and promote growth under competitive conditions which favour faster growing and taller trees. This will not, however, necessarily produce the type of form that would emerge under more spacious conditions.



**Lomandra hystrix** should be planted as close as 1/2 to 1 m. The clumps will quickly expand and form dense mats.

**Trees:** Spacing of 2 m within and between rows in a zig-zag pattern is advised. Twenty percent of the total tree number should be selected for fast growth, in order to protect other species and provide shade soon. These numbers should be spread throughout the site.

Fast-growing species include: Blackwood (*Acacia melanoxylon*), River Oak (*Casuarina cunninghamiana*), Red Ash (*Alphitonia excelsa*), White Cedar (*Melia azederach*).

**In situations other than restoration sites:** Always consider the use of the tree in its situation – shade, attraction for birds, screening, etc. Suburban gardens have very different requirements than paddocks and looking after the 'darlings' is easier when it's close to the house and there aren't so many of them to care for. When designing a planting it is important to know the mature size and rate of growth of the selected species.

**Select species carefully to avoid disappointments and improve outcomes.**

**Site preparation:** Whether your tree planting site is a suburban garden, the nature strip, a creek bank, a fenceline or any other place, good site preparation will promote good conditions and give the youngsters a “good start in life”.



Weeds are an important factor to consider. Any weeds such as privet, lantana, etc, should be removed or at least be dead **before** planting.

Grass is the next most important competition to consider. Kikuyu is the most competitive and most difficult grass to deal with in tree planting sites because of its mat-forming habit. Kikuyu can smother and overgrow a tree seedling within one season. In a kikuyu-dominated site it is advisable to treat the planting spots with herbicide two weeks prior to planting or to use alternative methods to remove the grass.

A total spray-out of the entire site has been shown to be problematic, as this promotes weeds of all shapes and sizes, some of which may be very difficult to deal with later.

All grass should be mown very short immediately before planting. Some grasses, such as whiskey grass, provide useful protection from wind and frost in the first winter after planting and can be allowed to grow tall after the initial mowing.

**Planting method:**

- Soak all plants in water prior to planting.
- Use a narrow spade to make a space in the ground for the tree seedling. There is no need to take soil out of the ground when planting small rootstock, such as from hikos or native tubes.
- Insert the spade to the depth of the blade. Wiggle it to loosen the soil. If the soil is too heavy or hard, make several insertions, use your foot to stamp the blade into the ground.
- Tip the root-ball out of its container with your hand covering the soil and the stem of the seedling between your index and middle fingers. You may have to tap the bottom of the pot to loosen the root-ball out. Don't tease out any of the roots.
- Hold root-ball in one hand while making room in the loose soil for it, then lower it in so that the root-ball is level with the ground. Make sure that the stem is straight.
- Tamp down the surrounding soil with your hands or feet, avoiding the root-ball itself. This removes any air pockets and ensures good closure between the roots and the surrounding soil.
- Should you want to use any fertiliser, choose a slow-release pill suitable for native trees. Follow the instructions carefully as it is very easy to 'burn' young plants with fertiliser.
- It is advisable to 'water in' each seedling. This closes the last air pockets and provides moisture necessary for establishment. However, soil moisture itself may be sufficient initially, provided rain follows within one week after planting.



**Guards and mulch:**

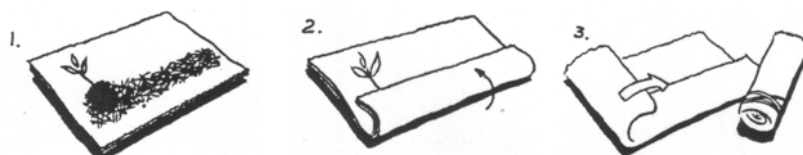
Most sites are subject to wallaby grazing, hares or rabbits. Once a lot of time and money has gone into plant selection & purchase, site preparation, planting and watering, the extra cost and time of providing guards is a good investment to ensure the success of the planting.

Milk cartons that open at both ends can be purchased with bamboo stakes for use on sites with rabbits and hares. The cartons are mostly used on the plateau, where growth rates are slower in the first year than in the coastal areas and seedling won't outgrow their guards too quickly. These guards are also good markers for the seedlings and provide protection from drift when maintenance spraying of grasses is undertaken later. To protect from wallabies, 800 to 900 mm tall plastic tubes are used, held by three wooden stakes.

**! It is important in each case that the stakes actually hold the guards away from the tree seedlings, cartons don't fold up on themselves and plastic tubes don't lean on the young foliage. !**

Mulch reduces weed growth, retains moisture and promotes plant growth. Mulch must not heap up against the stem of the seedling as this can cause rotting!

**Bundling:** Extra care in sandy soils can prevent drying and dying of the seedling. The seedling is placed on three sheets of newspaper with potting mix, water holding crystals and slow-release fertilizer. The paper is rolled up and provides a protective sleeve around the seedling.



*Lavenders Bridge, Bellingen  
Lomandra in foreground; mulch and tree guards.*