

MLG Complete nursery and planting guide

How to work with the Murrumbateman Landcare nursery to increase your property's biodiversity



Contents

If you are interested in improving the biodiversity of your property with native plants, financial members of the Murrumbateman Landcare Group (MLG) can obtain plants at no charge from the MLG Nursery. Plants are not available to non-members.

This guide has all you need to know about planning, requesting plants, planting and monitoring your plants. It also includes a section on what to do in the nursery as a volunteer.

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Step 1 – Planning:

Things to consider before you request plants

The nursery is staffed by volunteers, so we want to make sure that our efforts and resources are going to good use – that the plants we produce are in the ground, and in areas where they will thrive and benefit the environment.

Before requesting plants, think about both the species and number of plants you need. Some guidance is provided here on the various things to take into consideration for both of these.

You can also email our nursery people if you have questions or need help in planning (mlg_nursery@yan.org.au).

Choosing species to plant

What types of plants do you want? This will depend on the landscape of the area and the mixture you want.

Landscape site

Plants will grow best in areas they are suited to. When choosing species of plants for your property, consider the types of habitat you have and where plants are needed.

The nursery has made it easy for you to request plants that suit your property. Local Landcare experts have curated mixes of suitable species for 4 different landscape types (see diagram on the following page about paddock landscape types). This means you can simply choose the mix that will suit your property.

The 4 landscape types are:

- **slopes** – plants for grassy woodland and forest on better soils and mid to lower slopes and flats
- **ridges** – plants for dry forest on poor shallower soils, upper slopes and rocky ridges
- **riparian** – plants for damp sites including streambanks, dams and damp areas on flats
- **garden** – plants for garden sites close to a house.

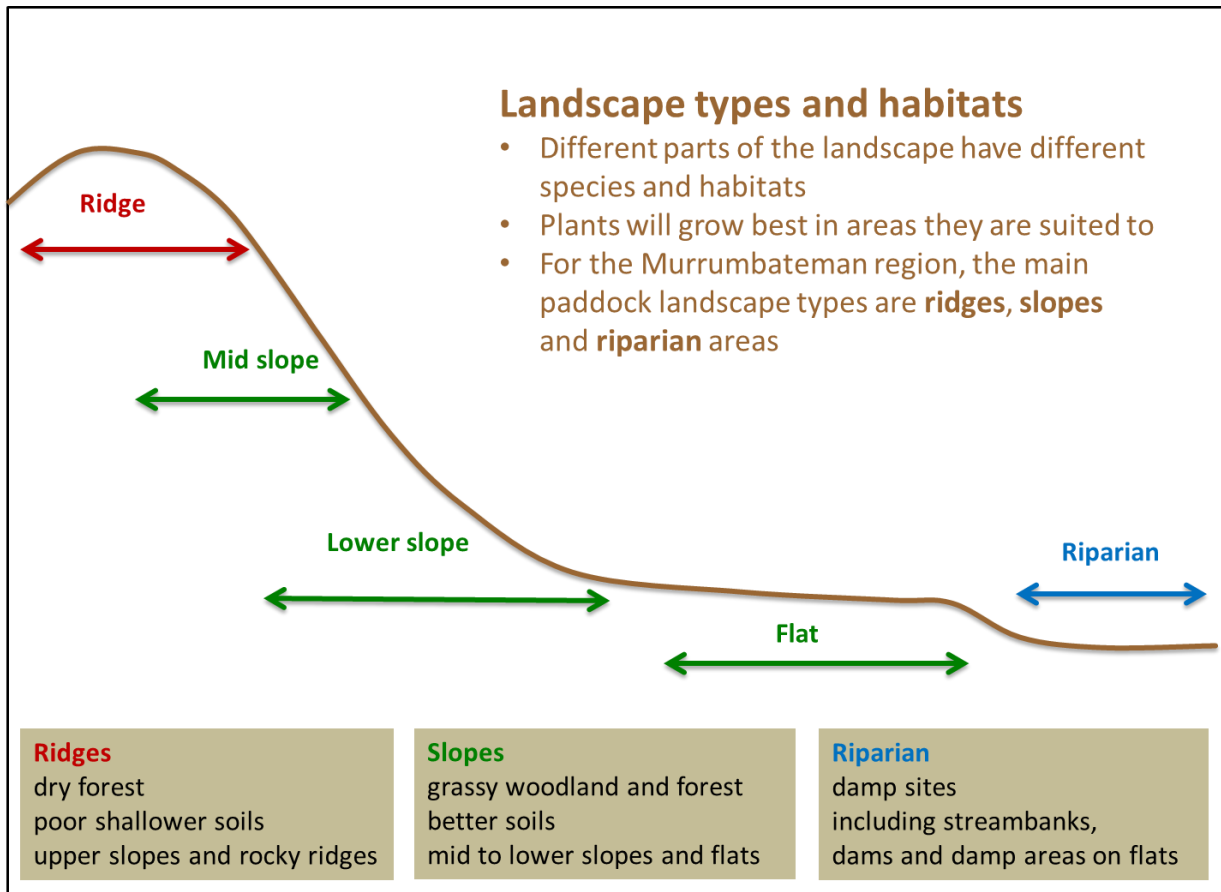
The nursery request form has plants arranged by landscape site. The MLG Nursery species guide has further information about the species height and growth habit and what they need to thrive.

List of species

The MLG Nursery propagates around 40 species of plants, suitable for the local area. Those highlighted in green on the order sheet have been selected for being 'climate ready', meaning that they grow not only in our locality but also in hotter areas, and that we are using genetically diverse seed to improve resilience. Species with * only have limited seed available, and may not be available once seed runs out.

We have also taken flammability rating information into consideration for garden plants. However, please realise that all vegetation can burn if a fire is hot enough.

The list and information about each species can be found in the [MLG Nursery species guide – NSW Landcare Gateway](#).



Deciding how many plants

How many plants do you want? This will depend on the area, type of plants and your resources.

Area, spacing and distance

A key consideration is the area you want to revegetate, which affects how many plants you need. Larger properties can clearly use more plants, while smaller properties can focus on filling in gaps and improving the variety of species.

In choosing areas for planting, think about improving poor areas or building on existing areas of better vegetation. Avoid areas of heavy weed, areas that have previously been fertilised heavily, or areas that are on a wildlife or stock path. These areas are not likely to be successful.

While the overall area is one consideration, you also need to consider:

- spacing between plants – leave more space between larger plants so they have enough room to grow and mature. As a rule of thumb, you will need 10–30 m between trees, and 2–10 m between shrubs.
- spacing between patches – If you have a large area, you do not need to cover all of it with vegetation. Consider creating patches of reasonably dense vegetation, where wildlife can travel a short distance to another patch (see also [Where to plant](#)).

Resources

Last, but definitely not least, is to think about the resources you have for planting. It can be tempting to request lots of plants, but you will need to make sure that you can get them in the ground and protect and water them. Please do not ask for more plants than you can plant and take care of.

Each plant will need:

- care before it is planted (watering daily, a shaded area to keep them)
- a hole to be planted in and ripping if needed
- initial watering (at least 2 litres per plant is recommended on planting day)
- a tree guard and stakes (these are available at cost price from the nursery and may need to be replaced over time – it is recommended that plants are protected for 1–5 years for best results)
- other optional items include wetting agents or surfactants to help the soil hold moisture, weed mat and mulch
- additional watering until established (depending on the position and rainfall).

The resources you will need to think about include:

- physical effort. Think about your physical fitness and how much digging, lifting and bending you can do in a day. You may be able to reduce the amount of digging required by getting planting lines ripped, but you will still need to physically place and settle each plant.
- transport. Think about how you will get the plants and materials to the planting site. Transporting enough water to plant many plants at one time can be a particular challenge.
- time. How much spare time do you have available during the planting season? Once you receive your seedlings, they should be planted out as soon as possible. A reasonably fit person might plant only around 20–25 plants in a day, especially if several days planting is required, so assess whether you have enough time in the planting season to get them all in the ground.
- materials. Make sure you have the tools you need for planting and enough guards and stakes – small plants are the most vulnerable to grazing and will need protection.

If you do not have a lot of resources but are still keen to improve native vegetation on your property, consider holding a planting day and getting neighbours and friends to help.

Another method is to go gradually. Rather than trying to do 100 plants in one season, just do 20 and slowly build your habitats. If you are new to planting, starting slowly also gives you a chance to test the process and species – ask for a small number of plants in your first year and find out how many you can plant in a day, and what planting and protection methods suit your property.

Another option is to do direct seeding, where seeds are planted straight into the ground. MLG does not generally offer seeds for this option, but Greening Australia may be able to help for suitable sites and projects.

Bushfire considerations

MLG has recently completed a research project on bushfire landscaping for our region. Plants with low flammability can potentially assist in protecting our homes from bushfires. However, high flammability plants can exacerbate the risk of destruction.

We are selecting low flammability plants for our garden landscape site. Remember that regardless of the plant species used in the garden, it is vital to consider other aspects such as:

- the flammability of non-plant materials (e.g. mulches and decks)
- the density and pattern of planting
- availability of water
- the proximity of trees to each other and to buildings.

For landscape sites other than gardens, it may also be important to consider aspects such as species and planting density. For example, this may be a consideration in tree lanes.

Please note that all plants, even low flammability species, can burn if conditions are severe enough.

Please check our website before designing your planting, see: [Bushfire landscaping: designing gardens for bushfire-prone areas — NSW Landcare Gateway](#). Particular documents to note are:

- [Designing gardens for bushfire-prone areas](#)
- [Detailed information on flammability of plants suitable for our region.](#)

Step 2 – Requesting plants:

How to request plants from the Murrumbateman Landcare nursery

Financial members of MLG can obtain native plants each year at no charge. Plants are not available to non-members. MLG covers the cost of producing the tubestock and relies on volunteer labour.

The MLG Nursery propagates around 40 species of plants suitable for the local area. Most of these have been selected for being 'climate ready', meaning that they also grow in hotter areas and we use genetically diverse seed to improve resilience to climate change.

Please think about what your property needs before you place a request. Feel free to email our nursery managers for guidance (mlg_nursery@yan.org.au).

Requesting plants

Members can request plants by filling in the [MLG Nursery request form — NSW Landcare Gateway](#).

Download and complete the form and send it by email to mlg_nursery@yan.org.au. Please give the file a meaningful name by adding your name to the file name and saving it.

If you are unable to complete the request form, please contact the nursery and we can explore other options with you.

Members will be alerted by email in January when requests can be placed. Please send your request form before the advertised cut-off date, and talk with our nursery people as early as possible if you are planning a larger order.

You can request either a mix of species, or particular species. You are encouraged to order in lots of 20 (one tray) or 10 (half a tray).

Requesting mixed trays

It is a good idea to plant a variety of plants – from trees to understorey shrubs and even flowers and grasses. This creates a more natural habitat for wildlife to forage for food, find shelter and breed. Planting in species groups means that plants can crosspollinate and regenerate.

Local Landcare experts have curated **landscape mixes** of suitable species for 4 different landscape types. This means you can simply choose which mix will suit your property. The 4 landscape types, and the mix of plant species you will receive in each tray, are:

- **slopes** – plants for grassy woodland and forest on better soils and mid to lower slopes and flats (comprising about 20% eucalypts, 60% acacias, 20% flowers and grasses)
- **ridges** – plants for dry forest on poor shallower soils, upper slopes and rocky ridges (comprising about 25% eucalypts, 15% other trees, 50% acacias and other shrubs, 10% flowers and grasses)
- **riparian** – plants for damp sites including streambanks, dams and damp areas on flats (comprising about 20% eucalypts, 50% acacias and other shrubs, 30% flowers and grasses)
- **garden** – plants for garden sites close to a house (comprising about 10% trees, 45% acacias and other shrubs, 45% flowers and grasses)

Requesting particular species

If you have some existing vegetation, you can think about what species you might need to add to the mix to improve the biodiversity of your property. Please choose species that will suit your site.

Tree guards

Everyone is encouraged to use tree guards as they generally improve survival. Milk carton style cardboard guards with two bamboo stakes are available from the nursery at cost price of 90c each. You can obtain these when picking up your plants.

Numbers of plants

We encourage members to think about resources before making an order – planting requires time and effort. The nursery is staffed by volunteers, so we want to make sure that our efforts and resources are resulting in healthy plants growing in areas where they will thrive and benefit the environment.

Please note that the nursery cannot guarantee that requests will be completely filled; we do our best but it depends on several factors, including germination rates and total number of requests.

Orders up to 100 plants

Members can request up to 100 plants by simply filling in the request form.

- Complete the [MLG Nursery request form — NSW Landcare Gateway](#).
- Email to our nursery managers: mlg_nursery@yan.org.au.

Orders between 100 and 500 plants

Orders of between 100 and 500 plants are welcome using the same request form as above; however, we require some information about the planting site and the strategy for getting the plants in the ground (e.g. Where will the plants go? Who will be planting? Will the ground be ripped? Will fencing be needed? etc).

Requests for orders of 500+ plants

Requests for orders over 500 plants are also welcome for those with a suitable revegetation plan. For these larger orders, we would appreciate a 1-page plan for the revegetation site, preferably including a google map with the site outlined, a plan for fencing if needed, and a strategy for planting. This will constitute a 'landholder agreement' and we need these to continue to get grant funding.

In addition, we would like to give members the opportunity to attend at least one large scale-planting each year. This helps to build the Landcare community and gives members good experience in planting – and the host gains the benefit of extra hands to help with planting. Please include your availability for hosting such an event in your project plan.

Step 3 – Planting:

How to plant and care for your plants

We ask you to look after the plants you receive and set them in the landscape where they will have the best chance of both surviving and regenerating. The nursery is staffed by volunteers, so we want to make sure that our efforts and resources are resulting in healthy plants growing in areas where they will thrive and benefit the environment.

This planting guide provide step-by-step information on caring for your plants.

When you receive your tubestock

Plant them out as soon as possible. To keep your plants healthy until they can be planted out:

- keep the plants outside, ideally in shade or cool sunlight to allow hardening off without heat stress
- water them daily, unless they get rain.

Where to plant

Before requesting plants, you should have assessed where you will be planting, and requested plants accordingly.

Avoid areas that have a recent or long history of fertilisation. Thick, dense, tall non-native grasses are an indicator of this. Such areas need to be grazed and not fertilised for at least a decade for them to be suitable for establishment of healthy native vegetation.

Planting in groups is a good idea. The ideal is that your plants will form a small population that can cross-pollinate, regenerate and provide genetic diversity for future generations. Create habitat corridors with patches of reasonably dense vegetation, where wildlife can travel a short distance to another patch. In general, 100 metres is the maximum gap that wildlife will cross to reach trees and bushes.

However:

- if you already have high-quality native dominated grassland, do not plant dense trees and shrubs – scattered individual trees (10–30 m apart) and small clumps of shrubs will create bird habitat without obliterating the grassland
- eucalypts planted too closely together can slow down their maturation process – consider the size of an adult tree and the room it needs to mature; mortality rates of eucalypts tend to be low.

Be kind to the landscape – avoid the ‘hair-transplant’ look by choosing irregular spacings for plants.

Preparing and planting

To give your plants the best start:

- fencing will be needed if there are stock
- prepare the ground; ripping hard or compacted ground before planting can improve plant survival rates
- dig a hole or loosen soil if it has been ripped; consider adding wetting agents or surfactants to the soil to help ensure it holds moisture
- consider using a weed mat or mulch – these cut down on weed competition and help to keep in moisture
- use a tree guard if planting in paddocks; these can be purchased at cost price from the nursery and can be ordered when you request plants
- the plants may need additional watering until established, depending on the position and rainfall.

When planting:

- gently squeeze the tube and tap on the base to loosen the plant.
- tip the plant out and place it in the hole. fill in with soil and press down to remove air pockets, thus ensuring good contact between the roots and soil.
- create a small dip or ‘dam’ around the plant to collect rainfall.
- make sure you water your plants in – at least 2 litres per plant is recommended on planting day.

Further detailed information about planting can be found in the Greening Australia guides: [Revegetation techniques](#) and [Plant trees and shrubs](#).

For riparian plantings, please consult the Rivers of Carbon [Riparian Restoration Management Tubestock Guide](#), which includes information on how to plant, maintain and care for your tubestock.

Returning tubes and boxes

All tubes, trays and boxes should be returned to the nursery as soon as possible after planting. We really need them back!

Please:

- hose out boxes, trays and tubes
- restack the tubes in the trays and boxes(tightly) and
- return to the nursery.

They can be left outside the nursery – please send an email to mlg_nursery@yan.org.au to let us know you have left them.

Step 4 – After planting: Monitoring and feedback

It is important for us to know the results of plantings from our nursery tubestock.

This information helps us to plan our species list. It also goes into grant applications to fund equipment, seed and propagation consumables for the nursery, so that we can continue to provide plants without charge for members.

Whatever number of plants you request, we would love you to provide feedback about your planting, to help us plan for the future. We especially need information if your order was for 500 plants or more- feedback is essential to assist us in the grant funding process.

Please take photos before and after planting, then check on your planting after 1 year with a repeat photo, and fill in our [MLG Planting feedback form — NSW Landcare Gateway](#).

If you find it difficult to monitor your whole site, the following steps can be used to monitor plant survival rates:

- Select an area that will be for about 20 plants (1 tray).
- Take a photo of the site before planting.
- Plant out and take a photo after planting.
- Make a mud map of the 20 plants including species and location in the site, and keep it safe.
- After one year, check the survival of these 20 plants against the map, and take another photo.

Send the completed form and photos to mlg_nursery@yan.org.au.

Step 5 – Volunteering:

A guide to nursery tasks

We welcome and need volunteers to help out with the nursery – please contribute some time so everyone can benefit from the nursery resources.

Working bees are usually held on the first Saturday of each month, from 9.30 am to 11.30 am. Other days are organised as required, and members are notified by email. If it is hot, there is a marquee in the shed to give shade for volunteers working at the nursery.

Some jobs can also be done outside working bees. Chat to nursery management if you have time to complete some jobs at home or at other times (mlg_nursery@yan.org.au). These jobs include:

- label sorting
- pricking out
- picking up potting mix from Yass (ute or trailer needed).

Sowing

If you are at the nursery on a sowing day, first read the sowing document for each species (see the folder held by the nursery management team). This outlines any pretreatment that may be needed (e.g. hot water treatment and soaking overnight) and if the potting medium is modified with the addition of perlite.

Sowing seeds into seedling trays (for smaller shrubs, grasses and flowers)

- Put a piece of paper in the bottom of a seedling tray.
- Pour Martins Native Seed Planting Mix into the tray, with or without perlite mix.
- Put in four species labels and a label with the date of sowing.
- Sprinkle seeds on top.
- Gently sprinkle more sifted Martins Mix /perlite over the top for bigger seeds, or vermiculite/river sand for tiny seeds.
- Water the box.
- Put the box in the glasshouse beside the shed, or in the hotbox (depending on the time of year).

Sowing seeds into tubes (for larger trees and shrubs)

- Place four species labels into each box/tray, plus a label with the date of sowing.
- Follow the instructions for each species in the sowing document.
- Generally, large seeds (e.g. acacias) are sown about three to a tube.
- Small seeds (e.g. eucalypts) are sown using the smallest pinch per tube.
- Cover the seeds with the appropriate medium. Generally, larger seeds have sifted potting mix with or without perlite, and smaller seeds are generally lightly covered with vermiculite or river sand.
- Water the tubes.
- Place in glasshouse or shadehouse as appropriate.

Preparing boxes of tubes for sowing (trees and acacias) or for potting up seedlings

- Pack tubes into tray holders of 20, or into polystyrene boxes. If using polystyrene boxes, pack tubes in tightly, so that there are no gaps.
- Place the tray/box in the wheelbarrow.
- Pour Martins Seed Planting Mix, or a modified medium as described in the sowing document into the tubes.
- Gently pack soil down to remove air gaps by pushing from above with fingers or with another tube. You can also pack soil by gently dropping the box a short distance.
- Water the tray/box of tubes.

Potting seedlings into tubes

- Make a hole in the soil in a tube using a dibber (or dibbler) stick.
- Lift out plants from the seedling tray with the dibber stick and hold plant by a leaf.
- Try not to expose roots – if possible, leave soil on the roots as you lift. It is best to take out one plant at a time to reduce root exposure.
- Trim the roots with scissors if they are too long to go into the tube.
- Guide roots gently into the hole using the dibber stick, keeping roots as straight as possible.
- If roots are very large it is best to only half-fill the tube with potting mix; hold the tube horizontally with the potting mix along the length of the tube, and lay the roots along the top of the potting mix before gently filling the tube with more potting mix.
- Settle soil around roots and press firmly around the top with your fingers – it is important to get rid of air gaps.
- Top up with more soil if needed.
- Water with a Seasol solution (add about 20mls of Seasol per watering can).
- Add 4 labels to the box showing the plant type.
- Put finished boxes into the shadehouse/glasshouse as appropriate.

Weeding

- Weeding is required around the nursery, and for seedlings.



Website: [Murrumbateman Landcare Group — NSW Landcare Gateway](#)

Email: mlg_nursery@yan.org.au