



**MICROFOREST  
COLLECTIVE**



## **MAINTENANCE - STEP 8**

# **MICROFOREST BLUEPRINT**

Forming a maintenance crew is a great way to build  
community connections.



# FOLLOW THE BLUEPRINT

After I built the Downer pilot microforest, I realised my journey would have been easier if I had an instruction manual to follow. That's why I've created this Blueprint to help volunteer community leaders build a microforest.

The beauty of the Blueprint is it's not just for making microforests. It can be applied to other regenerative public landscape projects, like a food forest, community garden, a birdscape, pollinator patch or native grassland.

This Blueprint will give you confidence, save time and prevent you from making costly and time consuming errors.

The Blueprint is divided into eight discrete steps. By following each step you'll build a team of like-minded, community-spirited volunteers and together you'll realise your dream of a neighbourhood microforest.

Not only will you build a microforest, you'll make new and meaningful relationships based on shared values and create a more connected community. That's powerful.

## 8 STEPS

The eight steps build on each other and are best followed in order. The steps are:

Step 1 - Build a leadership team

Step 2 - Raise funds

**Step 3 - Community consultation**

Step 4 - Design

Step 5 - Approvals

Step 6 - Earthworks

Step 7 - Community planting

**Step 8 - Maintenance.**

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# LEARN NEW SKILLS



**Getting involved in a community-led microforest provides the opportunity to learn new skills.**



Here's a list of skills you can develop during a microforest project.

- Community engagement
- Working with government
- Project management
- Event management
- Stakeholder management
- Volunteer coordination
- Grant writing
- Fundraising (including crowdfunding)
- Public speaking
- Team leadership

And it's your chance to learn more about:

- Native plants
- Pollinator plants
- Water harvesting
- Landscape construction techniques.





Woo hoo you've built a microforest. Now it's time to galvanise the troops to maintain it.

You will be hanging out with these people for the next three years and are likely to build new connections.

The Miyawaki method of dense planting is reportedly maintenance free within three to five years. Then the microforest should be self-sustaining. Branches and leaves are allowed to fall to the forest floor where they become mulch and habitat.

In the first few years, weeding and mulching are critical. Weeding grasses and weeds occurs monthly during the growing season and a mulch top up every six months.

If not tackled early, the weeds will compete with your baby forest limiting growth and will make the landscape look scruffy.

Remember, you're not making a garden, but creating a natural(ish) ecosystem. Sometimes nature is messy.

From our experience, if the perimeter of beds is relatively 'tidy' the whole forest will look good.

The best way to kick-start maintenance is to schedule regular working bees during the growing season. At the end of this step, we've included a Maintenance Schedule that you may need to supply to your local authority when you are seeking approval for your forest (Step 5).

# MONTHLY WORKING BEES



**organise a regular time  
that's easy to remember**



At the Moruya Microforest we schedule working bees at the same time on the first Friday of the month. That way it's easy to remember.

Our one hour monthly lunchtime time slot suits our group, made up of mainly busy retirees. We use WhatsApp to communicate with one another.

Once a month we: weed, chat, top up mulch, collect rubbish and check plant growth.

If your community includes people with weekday commitments, consider scheduling working bees at weekends. If you're not sure - ask what works for the majority.

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We commit to maintain the microforest for its first three years.

In colder zones, like Canberra, plant growth slows during winter and weeds will be dormant. However, it's worth a quick visit to collect rubbish and check for vandalism.

To date, vandalism has been directed at structures like, the street libraries, not the plants.

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# Weeds

Keep the site as tidy as possible as some residents will not appreciate a scruffy landscape. Controlling weeds is the number one microforest maintenance task.

The key microforest weeds are exotic grasses like Couch (*Cynodon dactylon*) and Kikuyu (*Pennisetum clandestinum*).

Traditionally used to make lawns, the vigorous runners of these grasses invade newly planted shrub beds. If left unchecked, they will slow plant growth and swamp smaller plants and be a pain in the arse to remove!

Grasses won't be the only weeds taking advantage of your bare soil. There will be plenty of others.

Appoint someone skilled in plant identification to help your group spot what's a weed and what's a desirable plant. Install weed apps, like the CSIRO's WeedScan ([weedsan.org.au](http://weedsan.org.au)) on your phone.

It's also important to get someone to demonstrate to newcomers good weeding techniques.

Decide what you will do with the piles of weeds you generate. Grassy and non woody weeds (with soil removed) can be thrown onto adjoining grass and mowed. But this can look messy.

Alternatively garden waste can be solarised by covering with black plastic and left for months. At Downer we solarised weeds on top of site soil for seven months. When unveiled we'd made a beautiful earthy compost. Another option is to share green waste amongst residents' green bins.



# THE RIGHT TOOL FOR THE JOB



## Invest in sturdy tools for the group



### **SPADE EDGE**

One of the best ways to control spreading grasses is to maintain a spade edge around the planter bed perimeter. If maintained on a regular basis, this is a quick and chemical free way to keep grasses at bay.

### **SCALP GRASS AT EDGE**

To make life easier, you can also scalp the grass adjacent to the grass edge with a whipper snipper. I prefer to use a battery charged whipper snipper powered by renewable electricity.

### **PURCHASE STURDY TOOLS**

Invest in sturdy hand tools for weed removal. My favourite hand tools are the Korean Ho-mi and a French hoe. A couple of mulch forks are invaluable for transferring loads of mulch into wheelbarrows and tubs.





## TOOL STORAGE

Consider where you will store tools. Is there a house nearby where you can securely store equipment? Ideally the home would be in wheelbarrow distance from your microforest.

## MULCH

Mulch suppresses weeds, reduces evaporation and adds organic matter to the the soil. The best type of mulch is coarse organic mulch as opposed to fine mulch. Fine mulch can create an impenetrable mat that rain can't get through.

Depending upon your climate you may need to top the mulch up every six months to a depth of 75mm or 7.5cm or the depths your local council specifies. Ensure mulch is kept away from the base of woody stems otherwise it can rot the base.

### Buy mulch

The cheapest way to purchase mulch is to have a large load delivered, for example, 10m<sup>3</sup>, of a locally sourced composted green waste.

### Free mulch

Local tree loppers or your Council may supply mulch for free. If it's fresh, it may need to breakdown so as not to draw nutrients from your soil.

## DO WE NEED TO IRRIGATE?

Many of our microforests are located in parks with no access to reticulated water. From experience on public projects in the Australian Capital Territory, getting a tap installed is not easy and who foots the bill? Nor is directing rainwater from tanks on the adjacent property an easy option either.

We incorporate water harvesting under our forests to ensure we hold rainwater in the ground for longer. This helps our plants not just survive but thrive.

In our Canberra microforests, plants are watered after planting and have mostly survived.

### Are your plants struggling?

If your plants are struggling during the establishment period (first three years) due to drought it's time to take action.

### Water cart

Get a water cart to site pronto. This is a 1000 litre tank hauled to site via trailer and can be driven onto your site with minimum disturbance.

Water can be given to plants individually or if you've included a water harvesting system you can top up the underground water harvesting trenches via the Sand Surface Infiltration Points.

### Ask a firie

After a particularly dry winter and spring 2024, NSW Fire and Rescue ran a training exercise at the Moruya Microforest. They filled up the water harvesting system and surrounding soil with 30,000 litres of water. Before undertaking the activity, they sought approval from the land owner (the Anglican Church).

This massive water injection should see the rainforest plants of the forest thrive over their second summer.





# Mowing

In public parks in Canberra mowing remains the responsibility of ACT Government.


We design microforest paths and garden beds to accommodate for ease of use for ride-on-mowers. Government employees mow our microforest paths and central gathering space. But don't maintain the edge of the grass. This is a job for your volunteer maintenance crew.

At the Moruya Microforest, located in the grounds of St John's church, parishioners mow the grass.



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# PRUNING

## is pruning okay?



The Miyawaki method of forest says pruning is unnecessary in a well planned forest.

In September 2023, our first project, the Downer microforest turned three. On this birthday many plants had grown tall and dense shading the forest centre. Invasion of running grasses, like Couch were reduced to the microforest margins.

However, we had planted a ratio of four plants per square metre at the Downer Microforest. This density was too high for some species, like the signature tree, Kurrajong, *Brachychiton populneus*.

While pioneer shrubs like *Cassinia longifolia*, *Dodonea viscosa* and *Acacia* (Wattle) were growing rapidly, the Kurrajongs were struggling.

By comparison at the Watson Microforest, planted the year after Downer, the Kurrajongs were thriving. The plant ratio there was three plants per square metre, which seemed about the golden ratio.

In November 2023, we bit the bullet and trialled pruning to ground level fast growing shrubs within a one metre radius of the Kurrajongs. This will allow more sunlight, more nutrients and less competition to these slow growing yet long lived evergreen trees.

# Microforest Maintenance Plan

Activity		Notes
Hand weeding - removal of weeds particularly running grasses is the main job for your volunteer crew.		Educate group members so they can tell the difference between a weed and a desirable plant. Use a Weed Mapping App like <a href="https://researchdata.edu.au/act-southern-tablelands-weed-spotter/668005">https://researchdata.edu.au/act-southern-tablelands-weed-spotter/668005</a>
Microforest edge - use an electric whipper snipper around forest edges to reduce spread of running grasses like Couch and Kikuyu.		This activity is noisy and best done separately from working bees. Ideally use a battery charged whipper snipper (powered by green electricity) not a petrol charged one.
Microforest edge - use a sharp spade to dig a spade edge around the microforest.		This activity takes time and is best done by energetic individuals.
Weed reuse		Consider solarising weeds neatly on site or include them in green waste bins.
Rubbish - Pick up rubbish and dispose appropriately. If syringes are found check what the local protocol is for disposal.		A tidy site is less likely to generate complaints from neighbours or authorities.

# Microforest Maintenance Plan

## cont

Activity		Notes
<p>Top up mulch - ideally coarse mulch will be about 75mm or 7.5cm deep (different councils may require different depths). This is best done after wet weather so any available moisture is sealed in ground. Ensure mulch is not placed against trunks/stems of plants as it can rot the bark, ultimately damaging the tree/shrub.</p> <p>On the garden bed side of the edge make the mulch deeper to help reduce running grass invasion.</p>		<p>Check with your local authority – can they supply you with free mulch? Local tree contactors may happily provide mulch for free. They may request to meet you on site. Alternatively, purchase recycled green waste delivered by truck (10m<sup>3</sup>). You will need to supply a map with an x indicating where you want the material dropped.</p> <p>Depending on climate and type of mulch it may require top up every six months.</p>
<p>To prune or not to prune? If larger plants like Acacia (ie 1.5m and above) become too dense and obstruct views near paths – side branches can be sensitively removed to 1.5m above ground height to create a tree-like shape and reduce the likelihood of people hiding in dense undergrowth. Place excess branches on the forest floor where they will breakdown over time.</p>		<p>This is an optional task and not in line with Miyawaki teachings</p>







# Microforest Maintenance Plan

## cont

Activity		Notes
<p>Remove tree guards as plants outgrow them.</p> <p>Coreflute tree guards can be reused multiple times as can bamboo and timber stakes.</p>		<p>The timing of tree guards will depend upon the type of guard (unwaxed cardboard guards break down quickly) and your weather conditions.</p>
<p>Infestation on plants - fungal or insect infestations are part of the natural cycle. Do nothing - let nature take its course.</p>		
<p>Additional planting - It's unlikely you will need to replant when you plant at a ratio of three plants per square metre - if a plant dies, there will be a gap for a while and nature will take over.</p>		





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**Want to learn more?**

Find resources, guides and advice at  
[www.microforestcollective.com.au](http://www.microforestcollective.com.au)