ary shade

Planting under trees or in permanent shadows can pose a challenge. DERYN THORPE shares her tips for growing success in these tricky areas

he yin and yang of gardening means even magnificent, mature trees have a downside. For example, the drawback of the trees in my garden is their root systems, which block pipes, lift paving and suck moisture from the soil, creating a dry area where it's hard to establish plants. I leave the first two challenges to others to tackle, but have, through trial and error, overcome the dry shade challenge by using plants that thrive in dry, sandy soil.

Trees are not the only structures to create dry, shaded places in the garden. Areas beneath the house eaves and in the rain shadows created by fences and buildings can also be bone dry. However, in my own garden, it's the ground beneath trees and big shrubs, threaded by a dense underground network of roots, that I find to be the most problematic planting zone. The tree leaves not only create shade, but also limit the rainfall that reaches the soil. Their extensive feeder roots soak up much of the moisture that infiltrates the soil, as well as valuable nutrients.

getting established

The simplest way to dress up the area beneath a tree is to cover the soil with a layer of bark or stone mulch so it looks neat and tidy. Bark mulch should consist of big particles that let the water trickle through and also help to reduce weed germination and retain moisture.

If, however, like me, you see every area of bare ground as a planting opportunity and enjoy the challenge of establishing plants in such inhospitable areas, then here are some tips to get you started.

If the area has dense shade, it may be possible to let in some light by removing a few overhanging branches. Think carefully about this before pruning to ensure that the tree will still look balanced once you've cut it back.

Resist all temptation to create a raised garden bed around the tree. Adding a deep layer of soil over an existing tree's root system reduces the amount of oxygen that can penetrate into the underlying soil and will result in root death. Soil added near the trunk can cause collar rot, which will eventually kill the tree.

soil improvement

I garden in Perth, which has some of the most hydrophobic (non-wetting) soils in the world. I apply a surfactant-based wetting agent at least twice a year to dissolve waxy coatings and help the water penetrate.

I also rely on a sprinkler system to supply water year-round. If you have heavy clay soil, you can improve the whole bed before planting by incorporating lots of organic matter and, if your clay responds to gypsum, add about 2 cups per square metre (or 1 cup if using the liquid products). Alternatively, add the gypsum in with a 1:1 mix of soil and compost, and return to the hole.

Use a spade to remove a section of roots and soil beneath the tree. I aim for a hole about three times as wide and twice as deep as the potted plant. Try to avoid cutting through roots thicker than 4cm, but smaller roots are OK as new tree roots grow from the point where the old root was severed. >



Place a small handful of slow-release fertiliser into the hole and cover with soil improver or compost, mixed half and half with removed soil, so the top of the pot will be at ground level when planted.

Remove the plant from the pot, tease out the roots and put the plant into the ground, filling the hole with the compost mixed into the soil at the edge of the hole. If you have very sandy soil, add a handful of bentonite or kaolin clay, which will help hold onto water and nutrients. Add liquid seaweed to stimulate root growth.

living example

My 40-year-old coral tree (*Erythrina indica*) has a lush mixed planting beneath it. I grow the tough plants listed on the right, the standout plant being the angel's trumpet (*Brugmansia* spp.). It adds height to the design and has dramatic bell-like flowers year-round.

Adding light-coloured foliage brightens a shaded area, which makes the variegated blue flax lily (*Dianella* spp.), 'Hollard's Gold' oyster plant (*Acanthus* spp.), and the gold form of diosma (*Coleonema* spp.) very valuable.

The toughest of the plants used beneath my trees are succulents, blue flax lily, butcher's broom (which provides long-lasting cut foliage for the vase) and *Philodendron* 'Xanadu'. The colourful, dwarf sacred bamboo (*Nandina* spp.), which needs an occasional extra squirt of water, is a favourite of mine, along with the hybrid winter rose (*Helleborus* x hybridus) and the Serbian bellflower (*Campanula poscharskyana*), which creeps around the edges of the shade.

Under my trees, I keep a few plants in colourful ceramic pots. It's essential to place a paver under the pot, otherwise tree roots block up the drainage holes when they grow into them in search of water.

Bulbs look great beneath trees and my favourite shade-lovers are the ivy-leafed cyclamens that flower in autumn, and the late winter/spring flowering Spanish bluebells, and snowflakes (*Leucojum* spp.).

My Cape chestnut tree (*Calodendrum capense*) has a collection of assorted succulents at its feet. At the base of the trunk are bowls of rosette-like *Echeveria* spp. but I grow collections of *Sedum, Kalanchoe, Senecio* and *Aeonium* directly in the ground. I love the combination of foliage colours and forms, but I find the tree's seasonal leaf drop a trial as I have to regularly pick up the leaves, which smother the succulents.









- Angel's trumpet (Brugmansia spp.)
- Blue flax lily (*Dianella* spp.)
- Butcher's broom (Ruscus aculeatus)
- Ivy-leaved cyclamen (Cyclamen hederifolium)
- Lily turf (*Liriope* spp.)
- Oyster plant (*Acanthus mollis*)
- Rock lily (Arthropodium cirratum)
- Silver plectranthus (Plectranthus argentatus)
- Spanish bluebell (Hyacinthoides hispanica)
- Thomasia (Thomasia tenuivestita)
- Xanadu (Philodendron 'Xanadu')
- Zanzibar gem (Zamioculcas zamiifolia)



a novel approach

Botanist Janet Atkins has a different, but very successful, approach to planting in dry shade. Her secret for growing around established marri trees (*Eucalyptus calophylla*) in clay soil in the Perth hills is to plant in winter, with one good watering, and then leave them to establish with the winter rains. There is

enough rain at this time to infiltrate the deep roots of the marri, while providing enough surface moisture for the new plantings. After winter, no extra water is provided. She only uses understorey plants that are indigenous and suit a Mediterranean climate of winter rain and long periods of dry weather in summer.