

Being Water Wise Outdoors and in the Garden

In the Yard

- Use a broom to sweep paved outdoor areas.
- If possible, use a bucket when washing your car. Or take your vehicle to a commercial car wash that uses recycled water. Wash your car or boat on the lawn instead of on the road or driveway.
- Fit a trigger nozzle to all hoses.
- Install a rainwater tank. Tanks are available in a various sizes and styles. Although Cairns Regional Council does not allow tanks to be connected into the main water supply they can be connected to your toilet, laundry and garden hose.

Water Wise Gardens for the Wet Tropics

Wet Tropics Climate

- The landscapes of the Wet Tropics region are shaped by the local climate, which is unique in Australia.
- The climate has a distinct 'dry-season and wet-season' annual cycle. Wet seasons generally bring long periods of heavy rain during December to April. Dry seasons generally last from May until November.
- A waterwise garden is designed, planted and maintained with the aim of minimising the need for water, other than rainfall. If designed appropriately your garden can provide all of the benefits of relaxation, physical exercise and pleasure without using large amounts of water.

Plant Selection

There are three main categories of plants showing distinct tolerance levels of drought resistance:

1. Not drought tolerant - only a small percentage (< 5%) of plants now grown in the region are not tolerant to dry growing conditions.
2. Limited drought tolerance - the majority of plant species grown in Cairns can tolerate a temporary dry spell (several weeks without supplementary watering or rain) in the micro-environment where they grow.
3. Fully drought resistant - a small percentage of plants are very drought hardy. Most of them require well-drained conditions.

When selecting plants for your garden, please consider the following criteria:

- **Soils type** – sand or clay or shaly / gravelly soils.
- **Site aspect** – moist lowland or raised sites or hillsides.
- Species drought hardiness rating: not tolerant or tolerant or very resistant.
- **Microclimate** – exposed site or protected from wind and sun.
- Avoid plants with large soft leaves.
- Allow a couple of ‘indicator plants’ to grow in your garden where you can easily see them. Indicator plants’ are plants that require sustained moist soil conditions. When the soil dries out they wilt indicating to you that they and other plants need water. Let them stress a few more days before you water your garden. Other plants are hardier and can take more drought stress. If your indicator plants are not wilting, do not water your garden. The colourful soft-leaved Coleus is an excellent indicator plant.
- **Exotic plants** – many have a high water demand and will not perform well unless nurtured with regular watering. A select few are very drought tolerant. For example, several species and varieties of Ixora can withstand very harsh soil conditions and yet produce a show of flowers. Trees like the Cascara (Cassia fistula) are also very drought tolerant.
- **Native plants** – beware! Remember that we live in the ‘Wet Tropics’. Many endemic plants (locally native to this region) normally grow in moist or wet rainforests and may suffer from heat and water stress if they are exposed to the harsher suburban garden conditions. Other native plants that are not endemic here, but come from drier regions of Australia may not survive a heavy wet season. For example, a few Grevillea species and varieties grow well here, provided their site is well drained, but others will not survive one wet season. Use the tropical plants that have bulbs or tubers to carry them through the dry season.

Garden Design Advice

- Minimise lawn areas and allow them to brown-off during the dry season.
- Maximise the mulched areas. This includes any type of non-grass mulch.
- Plan your paths to direct water runoff to the garden beds.
- Create more shade and shelter in your garden. This will reduce heat and provide more wind protection, which will help save water.

Cultural Hints for a Waterwise Garden

- Use fertilizers sparingly and at the correct seasons. Use only slow-release fertilizers and organics. The conventional fertilizers dissolve quickly to be taken up by the plants, which respond with a flush of soft growth that requires more water to sustain that growth.
- Mulch, mulch and mulch. Turn all your garden waste into mulch (or compost). Palm fronds make excellent clean mulch. You can easily strip the leaflets from the midrib with a cane knife (good exercise). The butts of smaller fronds can be placed out of site below shrubs to rot down. Make sure they do not hold water and provide a breeding site for mosquitoes.
- Only water one quarter of your garden per day (if needed). This allows you to water that section properly and you should not have to water it again for another week.
- Only water your garden in the cool of the day – early morning or after dusk (water restrictions permitting). Up to 40% of water will evaporate if you water your garden during the day.
- When watering the garden target the root zone around the base of plants, instead of the leaves. Water less frequently but more thoroughly.
- Check the forecast. If there's rain ahead, let the rain do your watering for you.
- Minimise the number of potted plants you care for. During hot dry weather they need to be watered every day. Palms in pots will not tolerate drying out. They do not show wilt, but their fronds simply brown-off leaving them to look very unattractive. Grow succulent plants in pots. Epiphytic plants, such as Bromeliads, orchids and some ferns can also survive on limited watering and still look good.
- Above all: don't worry if you lose a few plants during drought conditions. It means that they are not suited to the area. Just replace them with the more drought tolerant plants. And have fun in your garden.

** Horticultural advice provided courtesy of John van Grieken.*