



# Care of New and Established Lawns

Since lawns require more water than most other areas of the garden, they therefore offer the most scope for savings. Lawn areas should be designed and sited to be practical. While lawn provides many practical benefits in a garden landscape, careful consideration of what type and where it is used is necessary. Careful preparation and good management can result in significant reductions in water use.

## SOIL IMPROVEMENT BEFORE PLANTING

Extra organic matter mixed through the top 15cm of sandy soil will dramatically improve both water and nutrient holding capacity. The only opportunity to do this is before the lawn is established. The extra organic matter enables longer periods between watering which encourages a deeper root system and a more efficient growth pattern. We recommend the addition of Bio-ganic or Multimix manure or both for this purpose. Sandy soils are also prone to becoming non-wettable or water repellent. This can be overcome by the use of soil wetting agents such as Grosorb or Wettasoil which should be applied immediately after laying the lawn.

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Choose your grass carefully warm season grasses such as the cultivars of couch "Santa Ana", Windsor Green, "Greenlees Park" and "Wintergreen" have the lowest water demand. They also have a high drought tolerance. Other warm season grasses such as "Buffalo", "Kikuyu" and "Saltene" have an intermediate water use rate and a reasonably good drought resistance. Cool climate grasses such as ryegrass, Kentucky Blue and bent grass have high water use rates and only a fair to poor drought resistance. They are not suitable for Western Australian conditions where water conservation is of prime importance. Some of the newer lawn grasses on the market have yet to be fully tested under WA conditions. There are conflicting opinions about the turf-type tall fescues such as "Arid". Zoysia is another new introduction to WA, though it has long been available overseas where it is highly regarded for both economical water use and good drought tolerance. It too, has yet to be tested under WA conditions.

## ESTABLISHMENT METHODS

There are three ways to establish a lawn. From turf rolls, runner (also referred to as shredded turf, sprigs or stolons) or seed. Turf rolls provide the most water efficient means to establishing a lawn in summer, with an instant cover from the start. It is possible to establish them during summer on one watering a day providing that the soil underneath has been well prepared. It is preferable though to establish new lawns during the cooler months of Spring and Autumn.

Take advantage of any delay this may cause by regularly removing weeds from the area.

If necessary the area can be mulched over summer to soften the appearance and prevent erosion.

## WATERING

If you wish to establish a turf lawn in summer it will be necessary to provide a standard 10mm watering at least once a day (depending upon restrictions) for the first 2 to 4 weeks. After this period it can be gradually treated more like an established lawn.

If you are frugal with your water you will be able to maintain an established lawn on a 10mm application twice a week in summer and every third or fourth day in the warm months of spring and autumn. During winter, water once a week if there is no rainfall. The ideal time to apply water is between 5am and 7am to minimise evaporation loss. Use catch cups to calculate your system accurately. These come with full instructions and are available at Waldecks.Reticulation Systems.

Old reticulation systems are often poorly designed and fitted with inappropriate sprinklers. Some of the common faults are misting and lines which water lawns and garden beds or other areas at the same time. Your local irrigation

supplier can give you valuable advice on the water efficiency of your present system and offer suggestions on ways of improving it.

## **WHAT TYPE OF SPRINKLERS TO USE**

The ideal reticulation system is one which will deliver an even coverage over the entire lawn. There should not be any other sprinklers watering different parts of the garden on the same line. Avoid using sprinklers which produce a fine spray or mist which have a high evaporation loss.

## **FEEDING YOUR LAWN**

Fertiliser use is closely linked to water use. Cutting down on the amount of water used also means you can cut down on the amount of fertiliser. The recommendations on the bags should be regarded as absolute maximum levels. If you are being frugal with water you should also be frugal with fertiliser and use less than the recommended rate. Fertilisers which have some animal manure content help to maintain the organic matter level of the soil. All fertilisers should be applied immediately before a watering.

## **MOWING A NEW AND ESTABLISHED LAWN**

Mowers should be set so that only one third of the leaf area is removed at any one time. This should leave a blade length of some 10 to 15mm. This amount of leaf shadows the soil surface and thus reduced evaporation loss. Closer mowing can cause scalping and possible exposure of the base of the grass and its roots to the sun. Since warm season grasses slow down in cold weather, the mower blades should be raised another 5mm or so during winter.

## **ESTABLISHED LAWN**

### **DO YOU NEED ALL THE LAWN YOU HAVE?**

The type, area and location of any lawn in the garden should be carefully considered. Lawns require more water than most other areas of the garden and therefore offer the most scope for savings. Lawn areas should be designed and sited to be practical. Lawn should never be used as a "fill in" material where nothing else could be thought of. Hardy ground covers and paving are two of the lower water use alternatives.

Take a fresh look at your garden to see if you really need all the lawn you presently have. Lawns do provide many practical benefits in a garden landscape but good management of lawn areas will result in significant reductions in water use.

## **WATER POLICIES**

The most water efficient way to manage a lawn is to give it just enough to survive over the hot months. A good guide to achieving this desirable level is to only water when the grass shows signs of stress. This is displayed as a loss of bright colour and a slight wilting. At this stage you have 24 to 48 hours to give the lawn a good deep drink of 10mm.

In order to know how much water your system is applying you need to measure its output. This is quite simple to do. All you need is any empty ice cream container which is placed out on the lawn. Then turn the sprinklers on and time how long it takes to gather 10mm of water in the bottom. This will give you the correct setting for the duration of watering for that station on your controller or for the timer on your tap. If you are frugal with your water you will be able to maintain a lawn on a 10mm application every second day in summer and every third or fourth day in the warm months of spring and autumn. The ideal time to apply water is between 5am and 8am to minimise evaporation loss.

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## **SPECIAL TREATMENTS**

Brown patches in a lawn may indicate poor water distribution or areas of non wettable soil. Even after a watering, the soil in these areas may still be bone-dry just beneath the surface. This problem can be easily overcome by the use of soil wetting agents which will save a lot of water.

## **TOP DRESSING**

Only top dress to even out bumps and hollows and then only use special top dressing mixes which contain organic matter.

## **CONVERTING AN UNWANTED LAWN AREA**

If you have an area of lawn which is either the wrong type or too difficult to maintain and which is not really needed, then it can be converted to a lower water use garden with minimum effort.

There are two simple ways of killing grass and leaving the area ready for replanting with hardier plants.

The first is to use a herbicide containing the active ingredient glyphosate. Apply the chemical according to instructions using a garden hose as a marker guide to ensure you get a complete coverage the first time. The dead thatch can be planted into directly some 3 weeks later.

The second method is to block out the light to the area by laying a thick sheet of black polythene over it. After 3 to 6 weeks all the grass will be dead. The dead thatch can be left as a mulch while the new plants are established. but in the case of Kikuyu, seeds may germinate for some time afterwards.