

TURNING A WET SPOT INTO PRODUCTIVE HABITAT or CREATING ONE!

Most gardens have at least one problem area where nothing you plant ever seems to grow as planned. Some of these sites are created because of the design of the house or the terrain around the property. Houses create shade, water tanks create wet overflows, and let's face it, Australia is a hot and less than hospitable landscape in most cases. In this article we will look at options to work with wet spots in your garden (or help you to create one).

If you are the downward side of an urban area, chances are you are going to experience an inundation of runoff every time it rains. It is hard to pre-plan a drainage system in those cases because each house orientation, roof line, driveway, patio and path that is built will alter the trajectory of the water flow onto and around your property.

There are of course box drains and grates that can be purchased and installed to redirect fast moving water flows or you can install a rubble drain that will allow the water to pool before it slowly drains off your property. Another option is to turn the excess flow of water to your advantage and build a wetland or more accurately a marsh garden. Any habitat that is based on very high moisture content of the soil will easily become a natural frog habitat as well so planning to include a breeding pond for the frogs is not a bad idea.

The basis of creating a marsh garden is to keep the moisture available to you on your property instead of trying to drain it away. Many garden borders that are based on cement foundations of bricks or rocks can often impeded the free flow of water through the soil and that is not a bad thing in a marsh garden. You can also buy roll of root barrier material, which are used in street plantings to stop surface roots growing laterally under pavements and lifting the paths. The root barrier (not Weedmat) is an inexpensive roll of thin but flexible plastic sheet that is impervious to both water and roots. Black plastic is also an option but it may be wise to use the construction grade plastic because it is a bit thicker and not as easy to pierce with a misplaced garden fork! Either way, around 30cm vertical barrier should impede the water flow enough to create your marsh garden and remember, you are only damming the flow of water so you need to leave the ingress point free of the barrier so that the water can flow in easily. It is also wise to install a rubble drain on the outside of your barrier at the lowest point of the marsh garden so that if it overflows in heavy rainfall, the excess water is directed off your property easily.

If you do not have a natural and continual ingress of water to sustain a marsh garden then you can create your own. To create a man-made marsh garden, you will need to remove the soil first and line the area with plastic before replacing the soil. After you have lined the area, you need to make sure the garden fork stays safely in the tool shed so you do not end up putting a hole in your marsh garden. If you are constructing your own marsh garden it is easy to contour the ground before you put the lining in so you can

control the direction the water will flow in periods of heavy rain. Remember to install some form of drain on the other side of your barrier to direct the overflow away from your property. It is also worth mentioning that your man-made marsh garden does not have to be one huge garden. Working with larger sheets of plastic can be cumbersome and heavy and lining a huge expanse with plastic can be a daunting task. You can easily create clusters of smaller marsh islands with little walkways in between. Creating a group of smaller marsh gardens means that you will have a greater latitude in choosing the plastic lining to suit and you can simply adapt the size of the garden to suit the size of the plastic that you can obtain rather than trying to find a big enough sheet of plastic to line the hole you have dug! If you are going to include a frog breeding pond in your design then it can just be another little self-contained sunken island.

Once you have mapped out the edges of your marsh garden, you need to consider options for the edges. If you have a natural wet spot, you may like to delineate it with a simple cement strip around the edge or a rock or brick wall will work as well.

Alternatively, you can plant a dense no-mow groundcover that will bridge the gap between your lawn and your marsh garden. Water hyssop (*Bacopa monnieri*) is a very versatile and dense Australian native groundcover that will carpet a sunny spot in your marsh garden very well and exclude a lot of weeds and grasses. It would also work really well as a walkway between your man-made marsh islands. If you have a shady spot, the Blue Star Creeper (*Isotoma fluviatilis*) will give the *Bacopa* a run for its money as it also forms a low dense no-mow carpet. The Marsh Pennywort (*Hydrocotyle verticillata*) grows a bit taller than the *Bacopa* as does the River Buttercup (*Ranunculus inundatus*), both will mingle with the *Bacopa* and provide some colour to your marsh garden but both need good light to fare well. The Angled Lobelia (*Lobelia anceps*) is taller again but forms a good dense clump and will bridge the gap between shade and sun.

If you have built your marsh garden to deal with an influx of water beyond your control, you will find that roots of your marsh plants will slow the water flow down within the garden and also filter the soil to remove any unwanted nutrients washed down from neighbouring properties. The following list of plants is only a small example of the species you should be able to find easily. Also check out our Frog Habitat article!

GROUNDCOVERS

Bacopa monnieri – carpeting groundcover, will span the area from wet to dry. Small pink flowers. Full sun or shade.

Hydrocotyle verticillata – round leafed loose carpeting groundcover.

Isotoma fluviatilis - carpeting groundcover for shade locations, pretty blue star flowers.

Ranunculus inundatus – loosely carpeting groundcover with lacey foliage and yellow flowers.

PLANTS UP TO 0.5m

Carex brunnea – Tussock forming, lush weeping foliage to 50cm. Sun or shade.
Elaeocharis pusilla – grass like sedge to 15cm, shallow water, moist soil.
Hydrocotyle verticillata – creeping pennywort, grows into the water and on the edges.
Lobelia anceps (syn *Lobelia elata*) – groundcover growing to 30cm with small blue lobelia flowers.
Sarcocornia quinqueflora – Spreading but bushy groundcover to 30cm . Grows in saltmarshes or alongside freshwater streams. Full sun or shade.
Schoenoplectiella mucronatus – vertical foliage to 50cm. Sun or shade, shallow water.
Selliera radicans – a succulent creeping herb growing in patches up to 1m across. Grows in saltmarshes or alongside freshwater streams. Full sun or shade.
Villarsia exaltata – large flat leaves up to 50cm tall. Shady spot.

PLANTS 0.5 to UNDER 1m

Carex apressa –Tussock forming, lush green foliage. Averages 80cm tall. Sun or shade.
Carex longebracteata – Tussock forming species to 80cm
Carex maculata – Tussock forming species to 60cm
Crinum pedunculatum – broad leafed bulbous lilly that produces a beautiful spray of white lilly flowers. Grown to 80cm tall.
Elaeocharis acuta – vertical foliage to 60cm, shallow water, moist soil or dryer spots
Ficinia nodosa – Thicker foliated species, grows to 1m, dense growth, weeping effect.
Juncus usitatus – 0.8m high – fine blue/green foliage, dense growth, weeping effect
Melaleuca thymifolia – small shrub with predominantly lacey purple flowers, occasionally white or pink. Grows to 1m tall. Tolerates wet or dry conditions.

PLANTS 1 -1.5m

Carex fascicularis - bushy species to 1m, shallow water
Cyperus gunnii – Vertical foliage to 1.5m. Full sun or shade.
Juncus continuus – 1.2m – fine lime green foliage.
Juncus kraussi – 1.5 m - very fine weeping golden/brown foliage. *J kraussi* has a thick, strong rhizome and is adaptable to saline conditions.
Lomandra hystrix – 1m high lush broad foliage – good frog breeding platform.
Machaerina juncea (syn *Baumea*) – blue foliated vertical reed grows to 1m high.

PLANTS OVER 1.5m

Cyperus exaltata – Vertical foliage to 1.8m. Full sun or shade.
Machaerina rubiginosa (syn *Baumea*) – green vertical reed grows up to 4m if water is freely available. Strong grower. Clumps to 2m wide.

LARGER GROWING SHRUBS AND SMALL TREES

Callistemon salignus – shrub to 8m with vibrant red new growth and cream flowers.
Casuarina glauca – small tree to 20m. Qld species can sucker but NSW species does not. There are dwarf varieties available also that may stay less than 2m.
Melaleuca ericifolia – shrub to 8m with cream flowers
Melaleuca quinquinervia – small tree to 15m with cream flowers.
Melaleuca stypheloides – small tree to 15m, sometimes 20m.