The Rain Garden: John Patrick, ABC Gardening Program 05/07/2008

Prolonged droughts in southern Australia has meant there is less water available for home gardeners, both in terms of natural rainfall and because of water restrictions. Gardeners are looking at different ways to overcome this dire situation and to prevent their gardens from becoming a wasteland. One method is to build a rain garden.

A rain garden is a system that collects water from paving, hard surfaces, roofs, and puts it through a filtering mechanism that removes nutrients and pollutants. The water can then be used to irrigate the garden or, can pass through the filtering system and be released into the drainage system.

Our rain garden:

• The rain garden we are building will collect rain from the roof and direct it into a planter box through a pipe system.

• The planter box will contain a layer of sand, and the water will run into that sand and some of it will be held, but excess will run through.

• Plants will use much of the water. But excess water runs into the sand, and into a layer of gravel at the bottom.

• Use a PVC pipe, with slots, or aggie pipe in the gravel layer at the bottom. This will help drain excess water into the drainage system, leaving the plants at the top to thrive and give you a wonderful green garden.

• But remember, any work done on the stormwater system, must be performed by a licensed plumber.

To make a rain garden:

- A timber container, or planter box, is lined with a sheet of plastic to prevent water spreading laterally through the joints in the timber.
- At the bottom we have laid 20mm of gravel (we used 10 to 14 mm gravel) below the pipe but it will eventually be filled up above the pipe.
- The pipe should be laid so that it flows, down to the lowest point in the container.
- Then place gravel around the pipe to prevent sand entering it.

• The next layer is sand. Fill the planter box up – it should be about 100mm from the top, but leave enough room for a good layer of large pebbles as mulch.

• An extra overflow pipe means that in a really heavy downpour, the excess water will go down into the garden and won't flood the whole garden.

• When choosing plants for the rain garden, select those that will tolerate occasional water logging when it floods, but extended periods of dryness when there's no rainfall.

• Remove as much soil as possible from the roots before planting because the potting mix will reduce the porosity of the sandy soil.

• Choose fibrous rooted plants which make use of the sandy medium they're growing in, but allow water to percolate through. There are many native and indigenous plants that fit that bill.

• We planted *Lomandra* along the back. In the foreground we planted *Carex testacea*; in the centre we planted a green form of kangaroo paw – known to love sandy, open soils and full sun so it should do well in the centre; and on each side a variegated *Dianella*.

• Once the garden is planted just top it off with about 50mm of pebbles.

• The stones act as good mulch and they're heavy enough not to float away if they get flooded. The air gaps between them allow ponding so only in a really big downpour will the overflow be needed.

• Once the plants are in and the mulch is on, just water the plants in.

Now the great thing about a rain garden is that it maximises the amount of water that would otherwise just run off. It removes nutrients and pollutants so it makes our streams and creeks much cleaner, and what's more, it brings a wonderful splash of colour to an area of the garden that was otherwise really pretty dull.

To watch this story, go to www.abc.net.au/gardening/video and click on the 'streaming' link.