

# Quachy's ibc system

After the success of Quachy's first concept system he decided that it was time to get serious with a second system, now that he had seen for himself that Aquaponics really works. He set out with 4 IBCs and decided on the popular CHIFT PIST design. This allows the water to remain at a constant height in the 3 IBC's which serve as fish tanks and the fourth acts as a sump tank. The sump tank is dug in to the ground and a hatched deck has been created over the top and hinged for easy access to the tank below. Drain pipes are covered making it a very neat system. The fish tanks have been screened with bamboo fencing to keep out the sunlight and stop algae growing.

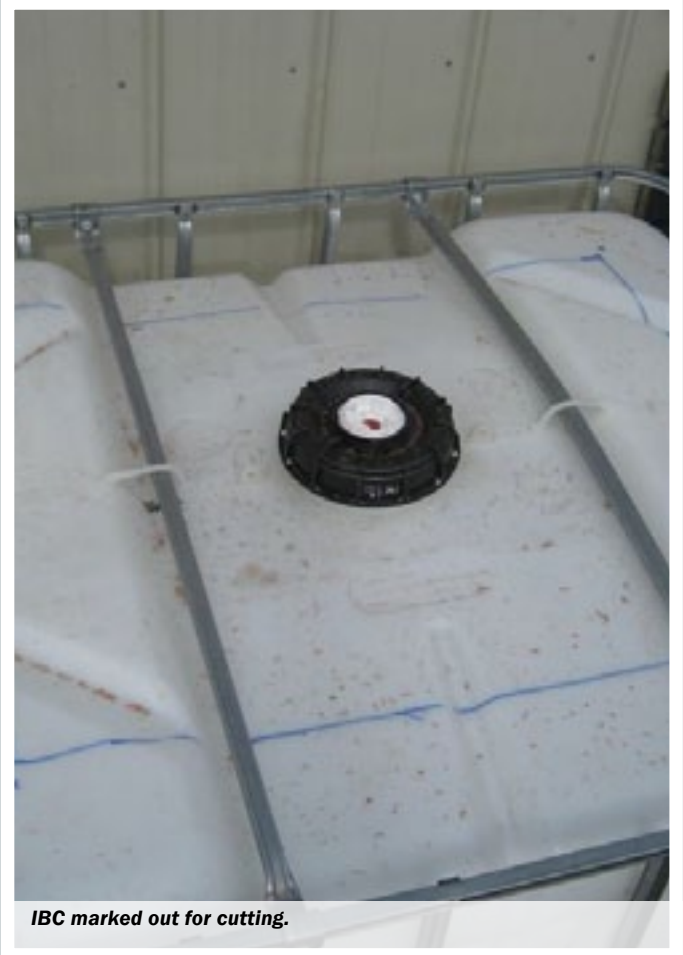
The benefit of having separate tanks include having different species of fish as well as being able to grade them. The original system can be used as a nursery for fingerlings or as a hospital tank.

The growbeds were made from six 500 litre stock troughs and filled with gravel, donated by a friend. Quachy's aim was to have a ratio of one to one, so for every litre of water he was after a litre of growbed medium as his biofilter. 3000 litres of fish tank water and 3000 litres of growbed medium.

For Quachy the progression to Aquaponics from a traditional dirt garden was very easy as both he and his wife are keen organic gardeners. He joined the Backyard Aquaponics forum after doing a quick search on the web and spent hours upon hours of reading and designing before posting pictures and sharing the progress of his successes with other forum members. He says "being able to provide fish for the family were added bonuses to the masses of fruit and vegies aquaponics can and does produce."



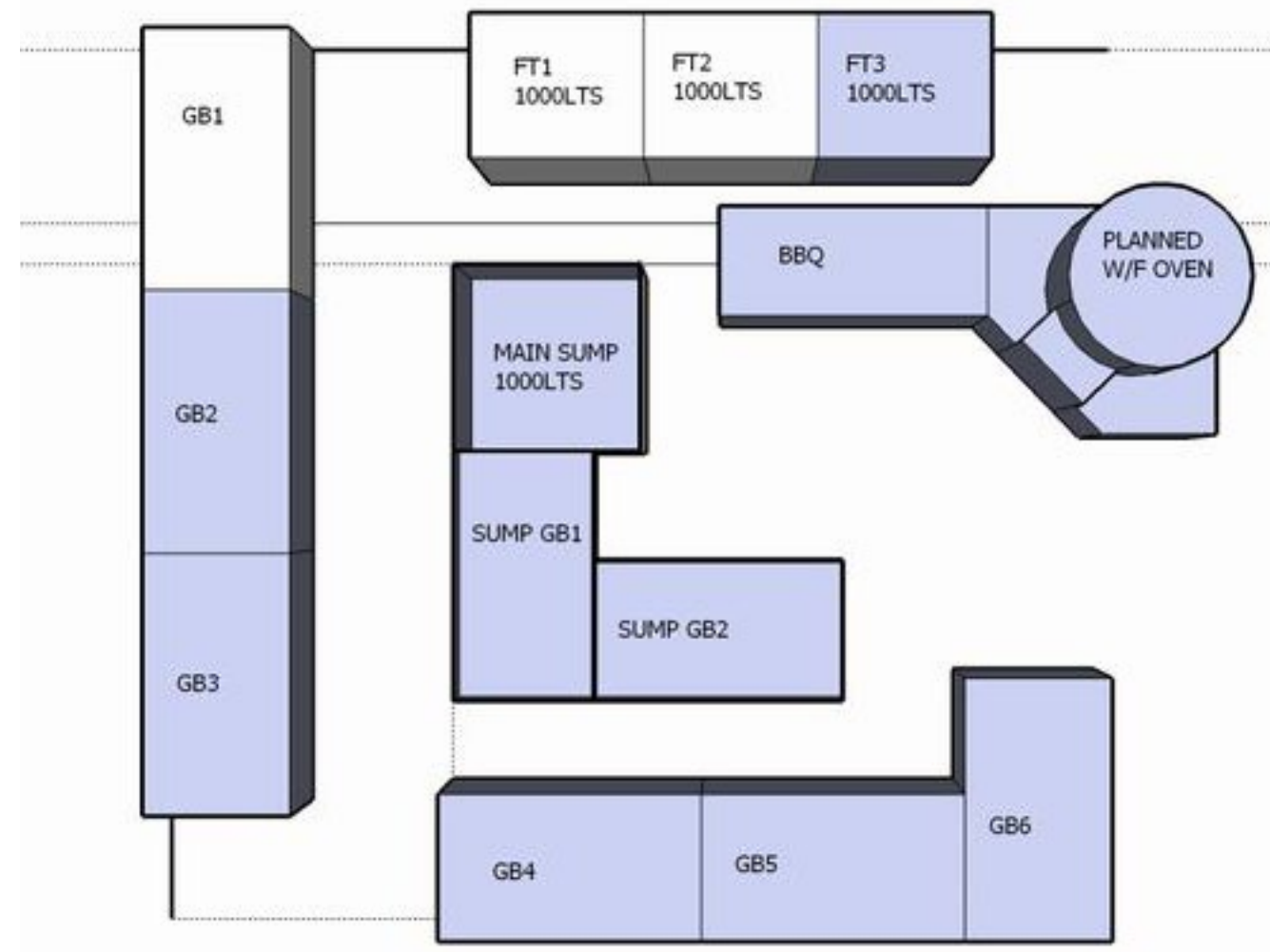
Tilkey tubs and olives barrels awaiting their new position.



IBC marked out for cutting.



System laid out and ready to go.



It is only the beginning.





Decking is hinged and can be accessed when required.



Pipework is hidden discretely under the decking and out of sight.



More ibcs and the in ground sump tank with child proof cover.



Fish tank IBCs shown at rear.



Shade cloth provides shelter from the hot sun.



IBC screened with bamboo fencing.



System overview





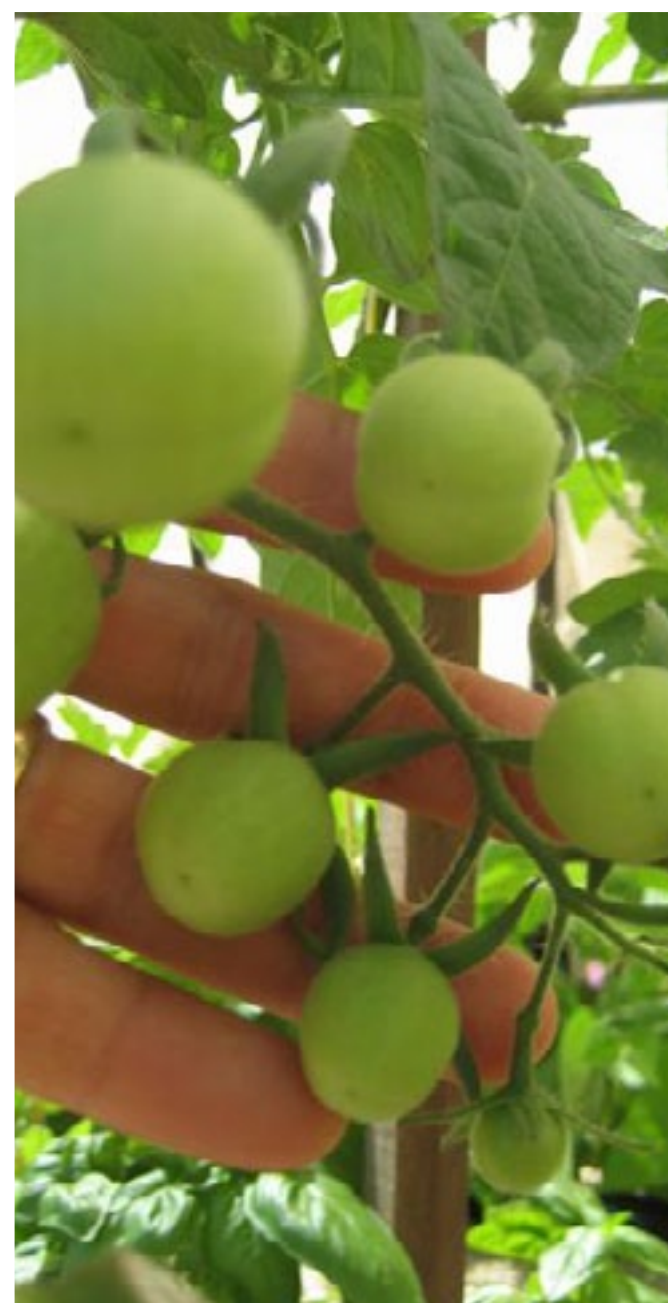
Plant growth coming along nicely.



Carrots and corn going crazy.



Beetroot.



Healthy crop of tomatoes.



Garnished and ready for steaming.



## Backyard AQUAPONICS WORKSHOP

Places are limited so please register your interest or contact us for the current workshop schedule

Ph: 08 9414 9334  
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Display centre Cnr Jandakot Rd & Berrigan Dr, Jandakot WA 6164

### Starting out with Backyard Aquaponics - 2 Hour Workshop

Run by **Faye Arcaro**; Gardening Australia's *Gardener of the Year 2007* and **Carl Schmidt**; BSc Aquaculture

The workshop will include information about running and operating your own aquaponic system and it will offer participants:

- Basics of Aquaponics
- Get the most of your plants
- Caring for your fish
- System design and maintenance
- Course notes and e-magazines

Light refreshments will be provided  
**All inclusive cost of \$55.00**

Workshops are held at BYAP Display Centre






# Gone Fishin's ibc system

Gone Fishin has managed to get a system up and running using a standard 2 standard 1000 litre IBC's, three bathtubs and a NFT style addition. The system is run as CHIFT PIST, an acronym which stands for constant height in fish tank pump in sump tank. There are no plans to bury any of the components as the setup will be installed on an existing concrete slab, making it an easy site to work with.

The second IBC was cut down to about half way, this forms a sump tank of around 500 litre capacity. Water is pumped from the sump tank to the main 1000 litre IBC using a 2400 litre per hour pump. When the fish tank water level rises, the tank will overflow to 50mm pvc pipe on to the growbed via gravity feed and then from growbed to sump tank.

The bath tubs are metal and have been thoroughly checked over for any signs of damage due to leaching and the risk to fish. Over the years metal tubs that have the surface damaged have been attributed to unexplained fish losses. The volume that each bathtub can hold is around 600 litres of media, which in this case will be a course gravel. The level in the bed has been managed with a simple standpipe and surround acting as a media guard. Water is adjusted to the beds using ball valves.

Apparently pressure pipe once glued and pushed together doesn't easily pull apart, lesson that is sometimes learnt the hard way. The channels were originally plumbed with 19mm and 13mm poly pipe, but water flow was not sufficient as the pipe would not lay flat and was eventually upgraded to 25mm pvc to allow the water to flow easily. The system performed well and barramundi were harvested and enjoyed as well as a range of vegetables which included radish, carrots, asparagus which was suggested by his wife and appeared to be growing very well.



More tomatoes.



Cucumber just developing.



Strawberries.



Channels with gravel media.



Original polypipe since upgraded to PVC.



Pipework plumbed and ready to check for leaks.