



Kimbriki Eco House and Garden

ecolicious was challenged to create an ultra sustainable aquaponic system, recovering recycled materials from across the Kimbriki Resource Recovery Centre on the Northern Beaches of Sydney. This system will continue to grow as we experiment with other recycled materials, and aquaponic growing methods.



System specifications

- 99% recycled materials sourced on site,
- no mains power for construction
- all crushed tiles and recycled sandstone hand washed
- solar powered pump with battery backup
- emulate a natural rock pond using recycled rock and crushed tiles
- water and terrestrial crop production
- native fish aquaculture food grade stock
- easily replicated in developing countries



ecolicious is a proud sponsor of the
Kimbriki Eco House and Garden

Kimbriki Eco House and Garden showcases and runs workshops on many aspects of sustainable living. Visit the [website](#) to see a variety of workshops on composting, eco gardens, water use and more.

Kimbriki Resource Recovery Centre Australian Native Landscape supplies,

and Concrete Recyclers

Collect and recycle:

- vegetation
- building materials
- crushed roof tiles, concrete and sand stone
- scrap metal and batteries
- glass and pet bottles
- electronic waste

for more info visit the [website](#)

Testimonial: - Peter Rutherford

Dear Charles,
Thank you so much for the wonderful aquaponic system you have constructed for us at our Kimbriki Eco House & Garden Education Centre. Your work has been impeccable and we now have an shining example of a food growing system that thousands of people will be able to learn from and use in their own homes and gardens.

We thank you & your team for all your hard & consistent work and wish you all the best in your business endeavours. You deserve all the success that will come your way.

Yours in Appreciation

Peter Rutherford
Senior Ecologist



Kimbriki Eco House & Garden
Terry Hills Sydney.

Kimbriki Eco Garden before the aquaponic's system and pond
Peter Rutherford has the hole dug,
note the changes to the new composting toilet building in background



Shaping the pond, laying pond liner and filling the pond with on site rain water.



Collecting recycled 100mm sandstone and recycled crushed roof tiles from Concrete Recyclers
we borrowed the old trailer from Australian Native Landscape supplies, who originally found it on the
scrap heap.



"how much weight did they say this trailer could take?" Jason
"not sure, a trailer load? we will be driving very slowly" me (note: mud guards on trailer)
Pre-rinsing gravel with onsite dam water.
We eventually had to hand scrub every rock individually to remove the clay, close to a tonne.



We hand washed close to 1 tonne of 10mm and 20mm crushed recycled roof tiles for the pond and grow beds, aquaponics requires system to be as clean as possible. With no power and only tank water, tiles were rinsed 4-5 times using a hand sifter.



Rocks and crushed tiles stacked to emulate a natural pond, however no soil or mud used Black Atlantis drain cell in bottom of pond to protect liner while we worked was found on site note the change in the toilet hand rail



Installing and testing child safety cage for OH&S, hardwood beams, cage (school fence) and construction safety fence (old pool fence) were sourced from the Buy Back Centre, recycled Timber Yard and ANL all within 100m of the site



Testing the boat grow

bed, boat was sourced from the Buy Back Centre, old logs were found in the garden



Walking on water, all of the bush rock was collected from around the garden. Note the painted handrail.



Birds eye view, close to completion



Kimbriki Eco House and Garden pond and aquaponics system stage 1 complete
Boat has graphics describing how aquaponics works
Pump to run the grow bed and cascade is powered by solar, cable found in landfill
Water level will be raised over grate in future



Pond the day after completion

A huge thank you to Peter, Ali and all the guys who helped source the materials from the entire Kimbriki site for this project.

Cheers
Charles and Jason
ecolicious

Would you like to know more about aquaponics or our custom designed systems?
contact info@ecolicious.com.au

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