

## December 2008 - Tony Forsyth (AuS MaDDoG)

Congratulations to Tony Forsyth on winning TOTM for December 2008 with his amazing in wall tank!

Tony is known as AuS MaDDoG on the RTAW Forums and you can read more about his tank in his Tank Journal.

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### Introduction:

Let me start my introduction, by allowing me to give you my recollection as to what drew me into this great hobby of ours many years ago.

My affection for the aquarium hobby started back many years ago when I was just a little whipper snipper of a lad keeping fresh water tropical's, however it was not until much later in the early 80's when I started diving with some friends around the local islands and outside reefs around Brisbane, that I really started to get more into the marine aquarium scene.

I eventually started to dive and snorkel further north to Bundaberg and south to the Tweed in search of sights and life that I had not seen.

I was also a holder of a marine collection permit many years ago which I used for private collection for myself and friends only.

My love of this underwater world started me on my journey and eventually had me setting up what was to be my first of many marine aquariums, and like many other aquarists I was hooked, and the tanks!! Well, they just got bigger and better as time went on as did the equipment.

I used to also dream, and think about how nice it would be, to one day own a larger than normal in wall display tank.

Anyway on with the story, after many years reef keeping and various set-ups, I eventually gave up and sold everything, due to ongoing work commitments interstate, which was not allowing me the time to maintain and look after my livestock and equipment properly, so in the early 90's I withdrew from the hobby altogether.

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Alas In early 2007 after many years away from the hobby I was walking through a local shopping centre one day, looking

for somewhere to have lunch, when I stumbled across this rather large marine display tank which was full of life and colour. Well that was it!! I remember telling myself, Tony!! You need to get yourself another display tank, and that I did. Oh!! And by the way!! I missed lunch that day as I spent so much time checking out this wonderful reef display, inch by inch, cm x cm.

A few weeks later I did just that, I got myself a whole new setup in the way of a 3'x3' corner tank which was up and running within a few months, however, and as usual, this was the start of things to come again, a few months later I was into the early planning stages of my new dream tank.

So here it is and I hope you all enjoy the read as much as I enjoyed reminiscing of the good old days and the events that led to where I am today in this great and very interesting hobby of ours, "Marine Aquariums" and Reefing the Australian Way.

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System Objectives: To have an in wall display tank that is easy to maintain and look after, with a choice selection of fish and corals, with lots of colour and water movement showing the varying currents in the display tank.

System Type: Mixed Reef.

Strike up date: Fish Room preparations and renovations started early September 07 with all work being carried out by myself. The tank was wet January 08. The fish room is 3150 x 2350 x 2400mm high, fully tiled to a height of 1100mm with a floor drain, and a drain to waste water. The room is also fitted with a 2 door cupboard for storage and a stainless steel wash hand basin and draining board for that all important washing and maintenance of pumps and other equipment. There is a vent to the outside, and a pedestal fan in the fish room circulating air on a permanent basis.

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Display Tank: The tank was Custom built by Maryanne's Aquariums and is 2360 x 910 x 750mm High using 12mm thick glass. The tank also has an inbuilt weir to one end and two weir pumping sections for in tank circulation; the tank has 2 braces dividing the surface lighting area into three equal areas, and is strengthened around the top and around the base, all vertical corners are also strengthened with additional glass strips. The display has approximately 50mm to 75mm of Calgrit substrate and approximately 150Kg's of living rock with another 50Kg's of base rock used in the initial start up of the display.

Display Lighting: 3 x Large Lumen Bright Reflectors fitted with 400w Reef-lux 12000k lamps controlled by Coral Vue dimmable electronic Ballasts. (Reef Exotics)

There are also 12 x 2' HO T5's which are dimmable from 0% -100% and 100% - 0% running Korallen Zucht Fiji Purple lamps, Korallen Zucht New Generation Coral lamps, and Sylvania Coral Star actinic lamps, all running Ice Cap waterproof T5 end caps and all with individual parabolic reflectors. All lighting is controlled using the Profilux plus II EX Computer Controller (Reefing Life)

My lighting period is as follows:

T5's start to come on in sequence over the display from approximately 5:00am going from 0% to 100% by midday, at midday the Mh's turn on, again in sequence over the display. Mh's start to turn off one by one from 8:30pm before the T5's start to dim to 0% by 10:00pm.

Lighting Frames: 3 x Light weight, 25 x 25 aluminium angle light frames, fitted to aluminum Cowdroy sliding tracks and wheel fittings, mounted to the ceiling above the display tank. Each frame houses a 400w Mh and 4 x T5's, 2 to the front of the display and 2 to the rear. Each set of lights can be slid along the tracks the full length of the fish room providing clear access to service inside the display. The lighting frames were built and installed by myself.

Stand: The stand was Custom built by myself using a combination of different sized structural pine and ply, which was all rebated, glued, and braced for added strength. The stand was finished using several coats of hard wearing white enamel paint.

Sump: My sump was Custom built by Maryanne's Aquariums and is an all in one unit consisting of a Water section 200 x 350 x 460mm High / DSB 700 x 350 x 430mm High / Media section 320 x 350 x 430mm High / DSB & Refugium 830 x 250 x 430mm High / Return section 390 x 250 x 460mm High. The overall size of the sump is 1220 x 610 x 460mm High.

My deep sand bed is approximately 250mm deep and the refugium is 100mm deep and heavily planted with Caulerpa taxifolia and is absolutely loaded with little critters everywhere.

Refugium Lighting: Aqualina 4 x HO T5 28w (Wonderfish) controlled using the Profilux Plus II EX Computer Controller for on and off only. The lighting period is run opposite to the display tank lighting.

Frag Tank: My frag tank was built by Maryanne's Aquariums and is 3'x2'x1' high. Lighting will be via HO T5's and will be tiered for different coral lighting requirements. The frag tank should be setup sometime early 2009.

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Support systems:

System Water: Natural salt water.

Aquarium Computer Controller: Profilux Plus II EX Computer Controller.

Display Intank Water circulation: In tank water circulation is provided by 4 x Gen 2 Vortech MPW40's working in sync set on Reefcrest mode (100% Reefsafes) and 3 x 6110 Tunze streams controlled by the Profilux Plus II EX Computer Controller, and 1 x X-Wave 6800 stream with multi-controller. (Guppies Aquarium Products) Total of 96,000 L/hr. All pumps reduce to approximately 50 to 60% from 9:00pm for approximately 10hrs before returning to 100% capacity.

Return Pump: Sump return is an Aquabee 7000 L/hr (Age of Aquariums) which also feeds from the return plumbing to my CA Reactor.

Skimmer: Is an out of sump skimmer, pulling water from my first chamber and returning to the bubble trap before my DSB the skimmer stands at 1120mm high 150mm diameter with single Becket Injector (Turbo Skimmer), and is powered by an Aquabee 7000 L/hr pump (Age of Aquariums) The skimmer is run slightly wet and delivers approximately 2 L/week of really dark brown to black skimmate.

Evaporation Top Up: Water top up is currently done manually using RO water, however top up will eventually be done and controlled using the Profilux Plus II EX Computer Controller when I eventually get around to setting it up. Evaporation is approximately 4 to 6 litres daily.

Water Changes: Natural saltwater changes are conducted manually with no set period, monitoring the tank and its inhabitants are the key to my water changes. Water changes in the near future will eventually be controlled using the Profilux Plus II EX Computer Controller, providing more regular smaller ongoing changes. Water storage is currently a 1000Lt IBC and 2 x 80Lt plastic storage containers.

Chilling: The tank temp is maintained using my 11/2 HP Aqua One Arctic Chiller (Maryanne's Aquariums) which is installed outside, and plumbed into the fish room. The chiller is controlled using the Profilux Plus II EX Computer Controller

And pumping to the chiller is provided using a Halia HX 6550

Heating: 1 x 300w Heater, controlled by the Profilux Plus II EX Computer Controller.

Support:

Calcium Addition: Is provided using a (Turbo twin chamber reactor) fed from my main return line, it is 520mm High x 150mm dia using a Via Aqua 1100 L/Hr circulation pump controlled by the Profilux Plus II EX Computer Controller (Always on). The chambers are filled with coarse coral rubble to the bottom of each chamber with Carib Sea Aragonite on top of that and topped off with A.R.M. media.

Drip dosing with Calcium Chloride &DampRid&rdquo; if and when required.

Alkalinity Addition: Alkalinity is maintained as noted above however

Drip dosing with Sodium Bicarbonate &Bi-Carb Soda&rdquo; if and when required.

Other Chemical Maintenance: Just recently started to run a fluidised bed filter with a small 500 L/hr pump using Eco

Phos phosphate and Silicate remover to maintain and minimize phosphate levels. (Age of Aquariums)

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Current Water Chemistry:

Nitrates: Undetectable

Phosphates: Undetectable using Salifert kit, .25 using Hanna Po4 tester.

Alkalinity: 2.51 meq/L started drip dosing with Sodium Bicarbonate.

Calcium: 460ppm

Salinity / Specific Gravity: 1.025 Monitored by the Profilux Plus II EX Computer Controller.

Magnesium: Not tested. (Next Test kit on the list)

pH 8.2 Monitored by the Profilux Plus II EX Computer Controller.

Ammonia Undetectable

Water Temp 26 degrees + or - .5 degrees C, Monitored by the Profilux Plus II EX Computer Controller.

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Fish Live Stock:

1 x Blue Tang	( <i>Paracanthurus hepatus</i> )
1 x Yellow Tang	( <i>Zebrasoma flavescens</i> )
1 x Purple Tang	( <i>Zebrasoma xanthurum</i> )
1 x Lipstick Tang	( <i>Naso lituratus</i> )
1 x Japonicas Tang	( <i>Acanthurus japonicus</i> )
1 x Royal Dottyback	( <i>Pseudochromis diadema</i> )
1 x Blue Face Angel (Juv)	( <i>Pomacanthus xanthometopon</i> )
1 x Royal Blue Pygmy Angel	( <i>Centropyge flavicauda</i> )
1 x Flame Angel	( <i>Centropyge loricula</i> )
1 x Lawnmower Blenny	( <i>Salarias fasciatus</i> )
1 x Bi-Colour Blenny	( <i>Ecsenius bicolor</i> )
1 x Pair Clowns (sumatran)	( <i>Premnas biaculeatus</i> )
1 x One Spot Fox Face	( <i>Siganus unimaculatus</i> )

- 1 x Arc Eyed Hawkfish (Paracirrhites arcatus)
- 1 x Longnosed Hawkfish (Oxycirrhites typus)
- 1 x Cleaner wrasse (Labroides dimidiatus)
- 1 x Bluetailed Wrasse (Anampses femininus)
- 1 x Chromis (Chromis Viridis)

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Coral Stock:

Elegance Coral

Various Acropora sp.

Goniopora sp.

Montipora sp.

Torches

Hammer Coral

Zoanthids

Corralimorphs

Various Acans

Open Brains

Various Other Brains

Leather Coral

Finger Leather

Sinularia

Daisy Star Polyps

Milliopora sp.

Scolmia

Pocillopora sp.

Stylophora sp.

Cabbage Coral

Duncanopsammia axifuga

Turbinaria

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The Rest of the Crew:

Various Hermit Crabs

Trochus and other Snails

Small Cucumber

1 x Blue Linkia Star (Linckia laevigata)

3 x Orange Tipped BTA's (Entacmaea quadricolor)

Acknowledgement:

First and foremost, I would like to thank my wife Gina, aka (Mrs AuS MaDDoG) as she has continued to support me, in this sometimes trying and very demanding, very expensive but very rewarding hobby, that has certainly kept me very busy during the last 12 to 18 months. Gina has helped me make my dream in-wall marine aquarium a reality.

Gina also gets so much enjoyment from relaxing in front of the tank, after a hard days work, enjoying the end result just as much as I do,

She will not admit it though!!

Gina has been the chief financier during the work in progress, and I must say it has been awesome to have her apart of it, and long may it continue.

I would also like to give a very big thank you to all my fellow hobby reefers, local fish shops and equipment suppliers and the many new friends who have supported me, given me guidance and helped me along the way during these months.

Last but not least a big thank you to all the people contributing to the plethora of information and help I have received along the way just by being a member of the Reefing The Australian Way and the MASA forums, it has been invaluable, and for that I thank you all.

Also a very big thank you to all concerned during the "Tank of the Month" selection process, and for choosing my tank to be "Tank of the month December 2008". This is a huge honor to me, and I am sure this will re-invigorate me in 2009 to fully complete what has been a very large work in progress for well over a year now, and who knows, maybe once my work in progress is finished and my corals start to grow out I may see you all here once again!!

Many Thanks

Tony Forsyth aka (AuS MaDDoG)