

April 2009 - Antony Fendt (Tone)

Congratulations to Antony Fendt on winning TOTM for April 2009 with his inspiring reef!

Antony is known as Tone on the RTAW Forums and you can read more about his tank in his Tank Journal.

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Tone's Tank

Firstly, thank you to my reefing buddies and peers who have voted in sympathy for me – I could have become a lot more mean in the forums, LOL. Truthfully, it is humbling to find myself in the great company of the many excellent TOTM's that have preceded this award. Among them are many true reef-nerds, neurotics, and addicts in far worse condition than I.

We begin somewhere around 1993. After many visits to my local LFS located only a few hundred metres from home, my LFS guy convinced me that freshwater species would be better off if I changed to marine. Believe it or not, in Australia those were very much the pioneer days of marine aquaria – just keeping fish alive for more than a week was an accomplishment.

There was scant information available online back then and only if you had access to academic search engines. It would be fair to say that worldwide the hobby was in the embryo stage of development. So I bumbled along with my LFS guy trying to make sense of things.

1998 was a Rubicon year in my discovery of Reef Central and then RTAW which was still a text based bulletin board – what a relief to discover that it wasn't just myself and my LFS guy decimating the wild-caught marine livestock. Along with a few other hardnuts we established MASQ in 2000/ 2001 which has grown into arguably the biggest and most active Marine Aquaria society in the country.

Things developed along with the advancement in equipment through a plethora of – tanks to a 5' and then the 2000L system around March 2007. The mega-tank plan had been with me for a few years and so I had collected an array of pumps, lights, skimmers, etc., to get going – most of which were now outdated and useless before I started.

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So here we are:

Biotope

Reef-crest / Reef-face / Bommie

System Volume

Approximately 2,000L maximum.

Tank

2.85m Wide x 0.90m deep x 0.75m high, euro-braced and 3 x cross-braces.

Custom build by Dennison of Mary-Anne's Aquariums, Brisbane.

Stand

75x25 RHS Duragal framing with 25x25 infill framing custom build by Ri-Co Engineering.

Recycled timber cladding, open faces.

Weir

Full depth end weir 300mm in width.

40mm Durso standpipe, 40mm intake for closed loop; 40mm emergency overflow.

Sump

450mm Wide x 600 wide x 450mm high.

ATJ auto top-up system.

Return pump

Iwaki MX70R feed to perimeter return loop with 8 x ¾" outlets. Soon to be upgraded to Sequence Barracuda and with manifold to drive the various water treating devices.

Refugium

900mm Wide x 450mm wide x 450mm high connected to the sump.

Refugium designed in the 'race' style based on A.Calfo's coral propagation tanks.

4 x 39W x 10,000k T5 lighting in anti-cycle.

Miracle Mud & Caulerpa.

Small DSB in separate compartment.

Cryptic Zone

Weir doubles as a CZ due to its large size.

Lighting

Metal halide:

4 x Lumenbright 20" reflectors 250mm off the water surface.

3 x 250W Lumatek electronic ballasts.

1 x 400W CoralVue dimmable electronic ballast plus one spare.

3 x 250W x 12,000k Reeflux SE lamps.

1 x 400W x 14,000k 'el Cheapo' SE lamp (it is surprising good).

Florescent:

Icecap 660 electronic ballast.

4 x 54W x 20,000k Aquaz Pro-Blue.

Moonlights:

LunarTracker auto lunar cycle – 5 LED

Lighting Cycle

Metal halide – 8 hours

Florescent – 12 hours

Skimmer

Prototype Turbo B1gB1tch dual recirculating Beckett; 200mm dia x 1.40m tall overall.

Laguna 16000 recirculation pump.

Eden 155 feed pump.

Water Movement Closed Loop

Sequence Hammerhead pump.

Ocean Motions 8-Way, 8 x 1' outlets feed to 2 banks of 4 x 3/4' Locline multi-directional nozzles fitted in bulkheads through the wall of the weir.

Runs 12 hours per day, off at night.

Wavemaking

1 x Ecotec Marine Vortec MP40W

4 x Tunze 6100

1 x Tunze wavebox (no extension)

1 x Tunze 7095 controller

Make-up water

PSI Custom RO/DI water filter, +250L per day.

Aquatec pressure booster pump.

220L RO reservoir – lasts 7 to 10 days on average

Climate Control

Kelvinator 7kw Inverter split unit

Chiller

Aquaone 1200

System Controllers

Milwaukee Meters SMS125 -- ORP and CO2

RTAW &Hoozamawatsit’ Excellent DIY System Controller:

Lights
Cooling
Heating
Timers
Alarms SMS

Calcium Reactor

Turbo dual chamber 200mm dia x 500mm high recirculated with an Aquabee 2000.

AquaMedic coarse calcium carbonate aggregate.

CO2 run aggressively at +60 bpm.

Ozone

500mg/hr

Cycle 30 mins on / 30 mins off.

UV

80W – seldom used now.

Miscellaneous

2 x 750W Standby power generators

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Livestock

Fish

Pseudanthias squamipinnis

Scalefin Anthias (females)

Pseudanthias engelhardi

Barrier Reef Anthias

Cirrhichthys falco

Dwarf Hawkfish

Centropyge loricula

Flame Angelfish

Centropyge aurantia

Golden Angelfish

Centropyge potteri

Potters angelfish

Pomacanthus xanthurus

Blueface Angelfish

Amphiprion melanopus

Red & Black Anemone Fish

Chromis viridis

Blue Green Chromis

Coris gaimard

Yellowtail Coris

Psuedocheilinus hexataenia

Sixline Wrasse

Microcanthus strigatus

Stripey

Cirripectes stigmaticus

Reticulated blenny

Atrosalarius fuscus holomelas

Brown Coral Blenny

Siganus vulpinus

Foxface Rabbitfish

Siganus vigatus

Virgate or Scribbled Rabbitfish

Acanthurus pyroferus

Mimic Surgeonfish

Paracanthurus hepatus

Pacific Blue Tang

Zebrasoma scopas

Scopas Tang

Zebrasoma xanthurum

Purple Tang

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Invertebrates

Shrimp

Lysmata amboinensis

Scarlet Cleaner Shrimp

Sea Stars

Linckia laevigata

Blue linckia

Sea Cucumbers

Holothuria hilla

Tiger tail

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Soft Corals

Xenia spp.

Pulsing Xenia

Lobophytum spp.

Green Leather Coral

Cladiella sp.

Finger Leather Coral

Anemone

Heteractis crista

Sebae Anemone

Zoanthids

Protopalythoa spp.

Green Zoanthids

Pink Zoanthids

Orange Zoanthids

Protopalythoa vestitus

Button polyps

Corallimorphs

Discosoma spp.

Mushroom Coral

Rhodactis sp.

Hairy Mushroom Coral

Ricordea yuma

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Hard Corals

Pocillora damicornis

Pink, Green, Magenta

Seriatopora hystrix

Birds nest

Acropora grandis

Staghorn acropora

Acropora formosa

Staghorn acropora

Acropora nobilis

Staghorn acropora

Acropora austera

Branching acropora

Acropora nasuta

Cluster acropora

Acropora granulosa

Bottlebrush acropora

Acropora clathrata

Table acropora

Acropora millepora

Cluster acropora

Acropora gemmifera

Cluster acropora

Montipora verrucosa

Encrusting montipora

Montipora efflorescens

Encrusting montipora

Montipora sp.

Plating montipora

Porites lichen

Plating jewel coral

Porites sp.

Boulder coral

Fungia sp.

Disk coral

Lobophyllia hemprichii

Lobed brain coral

Caulastrea furcata

Candy Cane / Trumpet coral

Favites sp.

Moon coral

Platygyra daedalea

Brain coral

Catalaphyllia jardenei

Elegance coral

Plerogyra sinuosa

Bubble coral

Duncanosammia

Wiskers coral

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Natural Filtration

Around 200kg of Live rock.

Some of the LR has been in my tanks since the first day J

Deep Sand Bed

100mm to 300mm deep made up of mainly Calgrit Fine Calcium feedstock, 40kg of Fiji Pink, and 10kg of 3mm marble chip in high flow areas.

The high water flow tends to move the bed around a bit creating areas of exception depth and other areas bare.

Water Parameters

Temperature Range - 24.5C – 27C. Average 26.1C

Salinity - 1.025

pH - 7.8 – 8.3 (low due to CO2 usage)

Alk - 9.2 – 10.8 dKh

Ca - 420 - 450 ppm

Mg - +/- 1830 ppm

Sr - 12 ppm – rarely measured

Nitrate - Not measured

Phosphate - Not measured, would be <0.10 ppm

Additives & Conditioners

Kalkwasser (Builders Lime) - Weak solution in top-up water

Baking Soda / Washing Soda - Occasional use to restore balance

DampRid - Occasional use to restore balance

Bacteria - ProdiBio products – don't ask!

Vodka / White Vinegar - 50/50 x 10ml x 2'ce per day

Magnesium - Kent Marine Tech-M

Strontium - Seachem – now and then.

Phosphate Remover - Only for experimentation or emergency

Granular Activated Carbon - Carbon Technologies

Husbandry

Generally, I spend ½ to 1 hour a day messing with the tank.

Water changes - 200L / 12 Weeks

Clean glass - Twice per week

Harvest Bryopsis - Once per fortnight

Vacuum sand bed - Never – high water motion plus Coris wrasse to keep sand surface ‘churned’.

Clean skimmer - Overflow cup drained daily. Neck washed twice per week.

Change GAC - 2L per month

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Pet hate?

I hate Bryopsis! Infestation has been ongoing for 2 years and it comes back each time just as it looks like it has been killed off.

What would I do different?

I wish I had purchased my own power station when Queensland Government sold them off.

Observations

It is pleasing to see how many more friendly reefers are coming on-line and joining up with their local MASx.

A united and strong representative hobby organisation is hugely useful in peddling influence to protect our natural marine environment and our access to it for the longevity of the pleasure it brings to us.

I would encourage more technical standardisation of setups – less ‘Robinson Crusoe’ approaches to setting up and maintaining a captive marine environment.

I would also encourage reefers to adopt the natural ‘pure’ methods in establishing and maintaining a reef tank and its inhabitants … think more ‘biotope’ for aquascaping and livestock selections.

And finally, but not least

Thanks to my many buddies in MASQ who have been supportive over the years and pretended to listen when I have had something to say.

Also thanks to the many RTAW supporters and other MASx reefers whose banter I continue enjoyed over the years.

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