



## *The Living Reef*

### *April 2003*

### *Editorial....*

It's amazing that once you have been doing something for long it almost becomes second nature and you don't realise how much work you are actually doing. This revelation became apparent to me when I came back from my honeymoon and spoke to our March "stand-in" newsletter editor, Terry Peake. He couldn't believe how much work the newsletter involved from writing to getting it sent out. Terry did a splendid job at filling in for me while I was away and I must admit that I was a bit worried that he would be a threat to "my newsletter" and would want to embark on a hostile newsletter editorship takeover! Lucky for me Terry had no such plans and gladly handed over the reins upon my return, thanx Terry.

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### *Upcoming Monthly Meetings....*

**April 30<sup>th</sup>**  
**Elmer Ellison**  
 15 Balwarra Ave  
 Dianella

**May 28<sup>th</sup>**  
*Phillipe Dor*

**June 25<sup>th</sup>**  
 ?

**July 30<sup>th</sup>**  
 ?

**August 27<sup>th</sup>**  
 ?

***Meetings start promptly at 7.30pm!***

## MASWA Contact Information....

### **Committee**

#### **President – General Enquiries**

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Currently Vacant

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#### **Secretary**

Currently Vacant

#### **Newsletter Editor – Newsletter Submissions and Membership Enquiries**

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#### **Science Officer**

Currently Vacant

### **Web Address**

[www.auscyber.net/maswa/](http://www.auscyber.net/maswa/)

### **Membership Payments**

Make cheques payable to:

Paul Taylor (MASWA Treasurer)

PO Box 7185

Shenton Park WA 6008

### **Newsletter Contributions**

If you would like to make a contribution to the newsletter please don't hesitate to contact the Newsletter Editor, David Bloch on the phone number or email address listed above. Contributions to the newsletter need to be received no later than 7 days prior to the next meeting date. Don't be shy – I don't care if you can't spell or use a computer. Hand written transcripts are fine!

## AQUARIUM ANTICS

What's got claws, beady eyes, sneaks around at night and eats your favorite corals? Crabs!

Do you want to EASILY catch these pesky little varmints?

The quick and easy way to remove these critters from your tank is to trap them. To make a quick and easy trap all you need is an empty glass coffee jar and some bait. Start out by positioning the jar at 45° against a rock and pop in a piece of bait, it's that simple! I prefer to use a whole mussel as it is too large and heavy for the fish to remove. Set the trap at night and by the morning it should be full of crabs!

## March Meeting Rundown....

It's been a long time since we have seen a tank of the calibre and size that Marc's tank was. The tank was around 3 metres long, 1 metre wide and 0.90 metres tall (please forgive me Marc, I have lost my MASWA notebook so don't have the exact info @ hand! Ed.). Filtration was achieved using the natural processes that occur in the fine textured bed of live sand and the small amount of live rock in the tank. Protein skimming, chilling, a calcium reactor and automatic top up water system were also present.

When we talk about aquarium design and aquascaping most people are not that adventurous or imaginative. Marc on the other hand has a natural talent for this and this could be seen in the way his coral and rock were aqua scaped. Instead of the boring diagonal front to back wall of live rock Marc's tank was designed with a rather minimal approach to rock design with a few low ledgy type rock bommies with large areas of sand between them. This gave a very natural appearance to the aquarium.

The way Marc positioned his corals was also quite interesting. Many were situated directly on the sand, not only on the rock. There were so many corals in Marc's tank that from the back of the room his tank looked like a continuous carpet of living coral!

I must not forget the fish – even though Marc might! In Marc's tank the fish are an after thought. In saying that he has no shortage of beautiful specimens including three flame hawks, a school of assorted tangs and surgeons and a few other fish (woops, blame it on the missing MASWA notebook again! Ed.)

This was a great meeting with a large attendance. Thankyou Marc for letting us see your beautiful aquarium.

## April Meeting Information....

From one large aquarium to another, bring it on! This month we are guests to the home of Elmer Ellison (that's Elmer **ELLISON**, not **FUD** Mr Social Coordinator Tony Fiorentino! Ed.). Elmer's tank has been through the wars with a disastrous crash some time ago but has been reengineered and setup again and from all accounts is looking great. From what I have been told Elmer has tried something that many of us have thought about doing but never done! He has skylights above his tank to harness the light from the sun. This clever thinking not only gives the corals and fish a seasonal day/night cycle but also exposes them to the influence of the moon.

Elmer's address is **15 Balwarra Avenue, Dianella**. Meetings start at 7:30pm sharp so be there or be square!

## Calculating Changes in Light Intensity....

by Nathan Cope

As we all know, corals and other photosynthetic invertebrates (such as *Tridacnid* clams) do not appreciate sudden changes in light intensity. It has been recommended by Andrew Trevor-Jones, a marine biologist from the Marine Aquarium Society of Sydney, that these animals never be given more than a twofold increase in light intensity when moving them up from a lower depth to a higher depth. Andrew didn't mention a recommendation for reductions of light intensity, but I would

recommend that the light intensity should never be reduced by more than a quarter at a time when moving them from a higher depth to a lower depth. Once moved, Andrew recommends that the animals be left there for a week or so to acclimatise to the intensity change before moving them any higher or lower.

Fine, you say, but how can the intensity of the light be determined without expensive measuring equipment. Well, Andrew says all you have to do is use the "Inverse Square Law".

What's that all about, you say? Well, if you move your coral from one depth to another depth, you can work out the amount that the irradiance has increased or decreased with the following formula.

$$(O/N)^2$$

Where:

O is the original distance that the coral was from your lamp, and

N is the new distance that the coral will be from your lamp.

(NB: It is the distance from the lamp, NOT the water surface, that we are concerned with here).

### Some Examples

#### Going Down

If moving your coral from a distance of 20cm from your lamp to a distance of 40cm from your lamp, calculate as follows:-

$$\begin{aligned} & (20/40)^2 \\ & = (0.5)^2 \\ & = 0.5 \times 0.5 \\ & = 0.25 \end{aligned}$$

So, the irradiance at the new location will be a quarter of the intensity that it was at the original location.

#### Going Up

If moving your coral higher up in your tank from a distance of 28cm from your lamp to a distance of 20cm from your lamp, calculate as follows:-

$$\begin{aligned} & (28/20)^2 \\ & = (1.4)^2 \\ & = 1.4 \times 1.4 \\ & = 1.96 \end{aligned}$$

So, the irradiance at the new location is roughly double the intensity that it was at the original location.

# MASWA Message Board....

## **Newsletter Naming Competition**

Last month we held the vote for the naming of our MASWA newsletter. The committee members ranked their favourite three names out of an exhausting list of finalists narrowing the field down to two names. The MASWA members then voted the winner out of the top two. The two finalists were "The Living Reef" and "Reef Encrustaceans". The voting was almost unanimous with the winner being....."The Living Reef". As you would have all been aware we had a prize for the person who came up with the winning name. The funny thing was that both the finalists were suggested by the same person! This person must have somehow rigged the competition. That would have been quite an achievement if in fact it was true however the winner aint that clever, it was me! Now I wish I could remember what the prize was.....!

## **Meeting Venues WANTED!**

If you would like to host a meeting, whether it is to show off your setup, or get a bunch of heads together to solve your problems, WE WANT YOU! Don't worry if your tank is only just beginning or you have an algae bloom, we have seen it all before and can help you if you need it. Please speak to any of the committee members if you would like to volunteer your home to us!!!! There are currently vacancies for meetings from June to November. Don't be scared, we don't bite (except maybe Tony!).

## **Water Testing**

Over the last few months we have been testing the water bought in by members at our MASWA meetings. This service has been working our well with plenty of volunteers willing to help out with the testing. All the results are recorded in a file so that the different relative levels of the parameters we are measuring can be compared from month to month. One of our key aims for this service is to be able quantify the different levels of the tested parameters with regard to the health of the aquariums. Quite often some aquariums appear to flourish while others that appear to have the potential to flourish do not even though their water quality parameters are optimal. Hopefully the data we will collect over time will help solve this dilemma.

**If you wish to have your water tested at a meeting, please bring along roughly 200ml of water in a clean, screw-top container** (a spring water bottle is best). Make sure you rinse the container with your aquarium water before filling it.

## **Live Sand Again, Please....**

We would like to request that anyone who has a healthy established live sand bed to bring along a small cup full of sand to either donate to the raffle or give to the meeting holder for their tank. You cannot ever get enough life in your sand! The greater the diversity of micro-organisms in your sand bed the more successful your aquarium will be – it's that simple.

## **Raffle Prizes Please....**

If you have any spare aquarium products, coral fragments, live rock or sand or anything worthy for donation to the raffle please bring them along to the next meeting.

## **New Grade of Lime Sand Available**

Thanks to ex vice president Sid, we have found out about a new grade of lime sand available from Cook Industrial Minerals. The existing product which many of us have used is quite fine, being in the size range of roughly 100 to 500µm. The new courser grade is between 1000 to 2000µm (1 to 2mm). The chemical properties are still the same, only the size is different. The product is available from Cook Industrial Minerals (CIM), Cutler Road, Jandakot, 9417 1111, [info@cim-pl.com.au](mailto:info@cim-pl.com.au).

## **Excursions....**

MASWA is keen to organise excursions and social events for its members. Below is a list of possible excursion venues:

- *Wasterwater treatment plant (pooh!)*
- *Fremantle Maritime Centre Aquaculture Hatchery (TAFE)*
- *Aquarium Shop Crawl (Anyone drive a bus? Ed.)*
- *Snorkelling Trip/Picnic to Port Gregory (Reef is a Sanctuary Zone, Doh!)*

These are just a few suggestions. If you are interested or have any other venue suggestions please let a committee member know.

# Fishy Links and News....

## **REARING SYSTEM FOR CRUSTACEANS**

The design and operation of a small research scale and a mass commercial scale rearing system for the culture of marine ornamental decapod crustacean larvae are described in the present paper. Preliminary data on the culture of the Mediterranean cleaner shrimp (*Lysmata seticaudata*), peppermint shrimp (*Lysmata wurdemanni*), blue-white partner shrimp (*Periclimenes sagittifer*), sponge crab (*Cryptodromiopsis antillensis*) and green emerald crab (*Mithraculus sculptus*) are also presented.

The use of these "planktonkreisel" based systems allowed the complete larval development of the

above-mentioned species, inducing minimal mechanical stress while keeping an excellent water quality. Higher survival rates (up to 70% and 60% for *L. seticaudata* and *L. wurdemanni*, respectively) to the post-larval stage and a shorter larval stage duration (27 and 22 days for *L. seticaudata* and *L. wurdemanni*, respectively) were achieved, in comparison to conventional rearing systems. This culture technology may play a key role in the realisation of a commercial culture of these highly priced crustacean species and therefore the reduction of wild specimen collection.

#### *Aquaculture*

Volume 218, Issues 1-4, 27 March 2003

Pages 329-339

"A rearing system for the culture of ornamental decapod crustacean larvae"

R. Caladoa, L. Narcisoa, S. Moraisa, A. L. Rhyneb and J. Linb

#### **FINDING NEMO – DISNEY/PIXAR PRODUCTION**

Later this year a new movie by the makers of Monsters Inc., Toy Story 1 and 2 and A Bugs Life will hit the screens in Australia. The movie titled "Finding Nemo" is the adventure a father (a clownfish) goes through to find his son Nemo and friend (Dory, a blue tang) who are caught by aquarium collectors on the GBR and sold to a dentist who overlooks Sydney Harbour. Pictures from the movie and trailers can be downloaded at:

[www.pixar.com](http://www.pixar.com) or [www.findingnemo.com](http://www.findingnemo.com)



### *Buy, Sell and Swap....*

#### **REEF AQUARIUM AND CABINET**

122cm X 75cm X 61cm black silicon aquarium with 2X overflow and 2X inlet holes on pine cabinet. Includes all plumbing, 50cm cube glass sump, downdraft protein skimmer (no pump), gravity feed water top up valve and hanging light hood (not including lights!). **\$800 ONO.**

Contact David on:

email: [fishnut@optusnet.com.au](mailto:fishnut@optusnet.com.au)

mobile: 0412 079 886

#### **METAL HALIDE CONTROL GEAR**

Metal halide control gear for 150 watt light. Control gear only - does not include lighting plug and cord or bulb holder and bulb. The asking price **\$75 ONO**

Contact David on

email: [fishnut@optusnet.com.au](mailto:fishnut@optusnet.com.au)

mobile: 0412 079 886

#### **METAL HALIDE GEAR**

Metal halide control gear, lamp holder and reflector (including 400 W bulb). The asking price **\$165 ONO.**

Contact Carl on:

email: [carlevans@optusnet.com.au](mailto:carlevans@optusnet.com.au)

mobile: 0409 785 251

#### **TRIDACNA SQUAMOSA CLAM**

Large clam, approx 15cm long with mottled gold, green and brown colouration. Good condition, too large for existing tank. The asking price is **\$60 ONO.**

Contact David on

email: [fishnut@optusnet.com.au](mailto:fishnut@optusnet.com.au)

mobile: 0412 079 886

