

MASWA Newsletter

(December 2000)

ATTENTION: This month's MASWA meeting is Wednesday, **20th December**. Check your calendar, because it could be the day you receive this!!! **ALSO**, this meeting will be starting at the

earlier time of 7PM due to BBQ (see below).

This Month's Meeting

The meeting is to be held at Nathan Cope's house. This is almost a MASWA tradition now as it will be the third end-of-year meeting at Nathan's house. As always at the end of year "Christmas party" meeting, there will be hot Fruit Mince Pies but this year, there will also be a **sausage sizzle happening outside on the barbecue!** Sausages, hotdog rolls, mustard and tomato sauce will all be supplied.

Nathan has a 7.5'L x 3'W x 2.5'T reef tank which is rumoured to be 1000L in volume (this is always debated when the tank is viewed, as everyone except Nathan seems sure that it must hold more than that). Nathan's reef went drastically downhill around the end of August due to a water change, of all things! Thanks to the help of Jan Anderson and Tony Fiorentino, the tank was torn down and put back together over 3 days which gave it a new lease of life. The tank has only really completed its cycling in the last 2 or 3 weeks but is really looking good again with some incredible coralline algae growth. A few corals and some fish were lost during the crash and Nathan hasn't wanted to fully restock the tank until he was sure it was doing okay and consequently there are only a little over a dozen corals in residence (**donations will be welcome**).

You'd have to be mad to miss the end of year MASWA party, so make sure you come along and join in the fun. The address is **21A Norton St, South Perth**. The meeting will begin at **7.30pm**.

Did you know?

There may be over 200,000 individual diatoms in a litre of sea water!

Last Month's Meeting

The last meeting was at Fremantle Oceanfarm (FO) on the South Mole. This would have to have been the most interesting meeting we have had all year. FO is run by Denis Robinson, a very likeable character who always has an amusing story to tell. Denis is probably best known in the hobby as the guy who delivers ocean water to hobbyists homes for water changes.

Those members who arrived at FO early enough, were taken by Denis to see the Pink Snapper in their sea cages in the harbour. We were also given the opportunity to feed these Snapper which have been reared this way from larvae through to their current adult size. Denis gave us a tour of the premises and a rundown on the history of the area and how FO came to be.

We were also introduced to Andy (sorry, didn't catch your last name) who is using some of the space at FO to grow *Artemia* (brine shrimp) and green water (phytoplankton). His original intention was to raise seahorses and this was the live food for them, but he is now focussing on increasing the Artemia output to a level where they can be sold commercially without having to import the bulk of them from South Australia. It is possible to buy enriched brine shrimp, rotifers and green water directly from Andy (see article below).

Denis also showed us another venture that has been running for a little while at FO; the captive breeding of marine ornamental species. The only species currently being worked on are clown fish (*Amphiprion ocellaris*), but once this has been perfected, other species may be reared too.

Denis tells us that FO doesn't yet survive on profits from farming of fish, but rather is sustained by other activities that at first seem to be peripheral to the business. FO are hoping to get some financial benefit from increased tourism with the current redevelopment of the South Mole. Currently FO is able to stay alive with help from kids on work experience, etc, but they are always happy to have volunteers with more experience in the ways of the world. Fremantle Oceanfarm is open every day from 9am to 4:30pm, so if you are bored one day and looking for something different to do, give Denis a call (9336 3616 or 0419 940 933) and ask if you can come down and help out.

Did you know?

The average depth of the ocean is 4 km (think about that next time you read that a marine animal comes from “shallow waters”).

The deepest point in the ocean is in the Mariana Trench at 11.7 km.

Food for your Corals

By Nathan Cope

As mentioned above, it is now possible to get enriched brine shrimp (*Artemia*), rotifers and green water (phytoplankton) from Andy at Fremantle Oceanfarm (FO). Andy will probably need about one week's notice to be able to provide any of the items mentioned below, but presumably you will be able to put in a standing order after the first time, if you wish, so that you can pick them up on a regular basis. Here is more information on why these live foods are so useful for marine hobbyists.

Brine Shrimp (*Artemia salina*) - Most hobbyists know what brine shrimp are (a type of large zooplankton) and, of course, we can already get them from most aquarium shops, but I have yet to see one that actually continues feeding the brine shrimp in the store until they are bought (I have suggested this to at least 3 store owners!). This means that by the time that our fish or corals are eating them, they have negligible nutritional value due to starvation. The advantage of buying brine shrimp from FO is that they have been recently fed and are therefore highly nutritious. FO is selling the brine shrimp for \$1.40 for 5g (which is about a teaspoon full of brine shrimp or a “single serve” as they are usually called in the shops) or \$20 for 75g. The brine shrimp must be picked up from FO. 1st and 2nd instar *Artemia* nauplii (1 – 3 days old) are also available but at 3 times the above-mentioned price.

Rotifers - Some people still seem to think that corals in our tanks don't need to be fed as long as they are provided with strong light for photosynthesis. This is like saying that as long as a tree has light, it doesn't need soil to be able to grow and stay healthy. And think about this; the sun is far stronger than any light we can provide over our tanks, yet corals in the wild still catch plankton in order to survive - in fact it has been said that corals have the largest percentage of their body devoted to food capture than any other animal, so obviously food organisms are pretty important to them. In fact, all that light does for photosynthetic corals (and trees) is provide an energy source via photosynthesis, but in order to grow and reproduce, corals (and trees) still need to obtain nutrients. Stony corals obtain their nutrients from food that they capture and trees derive their nutrients from the soil they are planted in.

Rotifers are a very small type of zooplankton that, due to their size, are typically used as a first food for rearing larval marine fish. As we know though, most stony corals are very specialised planktivores, so rotifers are also very good food organisms for them. (Soft corals are thought to obtain their nutrients from large-molecule organics dissolved in the water, which would explain why they will do well in “dirty” tanks when stony corals won't). All you have to do when feeding rotifers to your tank is turn off your skimmer, pour in the rotifers and the corals will do the rest. It will probably help if you add the rotifers after the lights are off as that is when most corals extend their tentacles. Obviously you should turn the protein skimmer back on at some point after you think the majority of rotifers have been eaten, but some hobbyists have reported populations of rotifers multiplying in their tanks even with a skimmer running.

Rotifers are also a great food for other filter feeders such as fan worms, feather stars, some bivalves, filter feeding crustaceans (such as porcelain/anemone crabs and barnacles) and, for those game enough to keep them, sea-apples. FO will sell rotifers for \$1 per litre if you go pick them up, but are willing to deliver 100 L to your door for \$50.

Green Water (Phytoplankton) - It is now known that some corals actually prefer phytoplankton over zooplankton. These corals are the very difficult-to-keep *Dendronephthya* spp. (Carnation corals) and related species. These corals are not photosynthetic at all and sometimes even have algae grow on them when positioned in the light for some time. If you want to keep some of these corals alive, then you should really try feeding them appropriate foods such as phytoplankton. The other good thing about phytoplankton is that, like other photosynthesising organisms, phytoplankton make great use of nitrogen compounds, ie, ammonia, nitrite and nitrate. If you are having some problems with these compounds in your tank, then adding some greenwater may go a long way toward alleviating it. The greenwater will stay alive as long as it is provided with aeration, light and nutrients. In the meantime, if you have added rotifers to your tank, they will also eat the green water and probably reproduce, which will provide more food for your corals. Green water is also great for other filter feeders such as sea squirts, some clams (especially young *Tridacnid*), fan worms and, for those game enough to keep them, sea-apples. FO is also selling phytoplankton for \$1 per litre if you go pick it up and will deliver 100L to your door for \$50.

Did you know?

*Global fish production exceeds that of cattle, sheep, poultry or eggs, and is the biggest source of wild or domesticated protein in the world.
But, 15 of the world's 17 largest fisheries are overfished or in trouble!*

Annual Donations

Annual membership donations are now due. The annual membership is \$20 per adult and is due by the 31st of January 2001 (the January MASWA meeting). **There will be no extensions after that time and those who have not paid will not receive newsletters or be eligible to attend meetings until they do pay.** That probably sounds harsh, but last year I had to chase one member for six months before he finally made a donation, and then, unbeknown to me, he only paid the half-year membership amount anyway.

Did you know?

The world's oceans contain over 1.3 billion cubic kilometres of sea water!

Raffle Time

Last meeting

Seven prizes were up for grabs at the November meeting; 2 x Lettuce Clips, a 115mL bottle of Kent "Zoe Marine" vitamin and mineral supplement/food additive, an UltraLife Reef Products X-Terminator Mantis Shrimp Trap and a 200g jar of Kent Expert Series "Turbo Calcium".

Grant's ticket was drawn out of the bowl first and he decided that first prize would be the Mantis Shrimp Trap. Next prize went to David who chose the Marine Zoe. Tony came third, and being the expert that he is, took the "Expert Series Kent Turbo Calcium". Greg took his almost standard prize of a lettuce clip for fourth prize and Frank did the same for fifth.

Did you know?

The largest Great White ever captured was a 6.4m female shark caught off Castillo de Cojimar, Cuba in May 1945. It weighed 3312kg and yielded a 455.8kg liver!

This meeting

As usual, the end-of-year meeting always has more expensive prizes and this year is no exception. We will be raffling off the following (sorry, no lettuce clips this time):

- Kent Pro.ScraperL algae remover (24"),
- Aquarium Systems pH Test Kit,
- 250mL jar of Seachem Purigen "ultimate organic removal" filter media,
- 250mL jar of Seachem Reef Advantage (calcium, magnesium and strontium supplement), and
- 2 x 1kg jars of InstaKalk calcium hydroxide.

A \$2 raffle ticket puts you in the draw to pick one of 6 great prizes!

Anyone who would like to see different types of prizes used in the raffles or perhaps some particular types of prizes removed from the raffle, please let either David Bloch or Nathan Cope know, so that we can adjust the prize line-up accordingly.

Upcoming Meetings

December 20th: **Nathan Cope**
 21A Norton St
 South Perth
January 31st: ?????
February 28th: ?????
March 28th: ?????

MASWA's World Wide Web address

<http://www.wantree.com.au/~conquest/andy/maswa/>

Newsletter and General Inquiries

to Nathan Cope E-mail address: copen@one.net.au
or phone on (08) 9367 9251 a/h or 0416 09 2000 b/h

Membership and Treasury Inquiries

to David Bloch E-mail address:
aguattech@opera.iinet.net.au
or phone on (08) 9375 2438 a/h

MASWA Membership

Currently MASWA requests an annual \$20 donation from members, \$10 for Junior members. This covers the cost of newsletters, drinks, nibbles and other costs associated with the society. Members will receive information sheets and discounts on some products.

Friends in Common

Jan Anderson, David Bloch, Darren & Raqual Collins, Nathan Cope, Andy Dolphin, Tony Fiorentino, Rob Fowler, Achille Gaglia, Paul Groves, Sid Harrison, Sean Hooper, Frank & Ben Krause, David Lee, Grant Magill, Stephen May, Phil & Caron Melvin, Wayne Mothershaw, Phil Searle, Ronald Tan, Paul Tayler, Steve Tofts, Greg Weryk, Rick White.

If you've paid your money and your name is not on this list, tell David! Members on the web should check they are on the web site members list.

If there is anything you would like to know more about or anything you would like to add to the newsletter, call or send comments to the current editor, Nathan Cope. Remember, this is your newsletter.

DISCLAIMER

The Marine Aquarists Society of WA is a name that we, as a group of friends with like interests have applied to ourselves for the purpose of information exchange. No one person, nor the group as a whole, can be held responsible for liabilities, injuries or other that may result either directly or indirectly as a result of our gatherings or the information exchange therein. The same applies to the information contained in this newsletter.