ISSUE
06
December
2009

MONTHLY NEWSLETTER FOR MAAST MEMBERS

THE MAASTARD

A NOTE FROM THE EDITOR

Hello Reefers,

I hope this finds you well, and more importantly your tank's in tip - top condition, corals thriving, and your fish always at the glass waiting to be fed.

This is my first run at addressing MAAST folks, and to be frank I have not a clue as to what I should say. I am just hoping that something will come to me before I have to send this off to Eve.

We can really use some articles from the members of MAAST expounding on the various aspects of tank maintenance, coral care, or any part of reefing that is important to you.

Additionally, The Frag it Forward program has morphed into the MAAST Frag Exchange whereas donating a coral frag into the program will ensure not only the propagation of our cherished corals but also the ability to help others in MAAST grow and ensure the success of our tank's inhabitants. Of course the success of this program resides with our ability and willingness to donate into the program.

In the event that you would like to submit information for upcoming newsletters, please feel free to contact myself (Allan) or (Pennies2Cents) via PM on the MAAST website.

- Allan -

ScorpiNo November POTM Winner

this issue

Bravely Battling the Belligerent Blue-Green Beast
Written By Justin Norman

"What is this slimy, nasty algae that's swarming my tank?? Its like a three-headed beast that just won't die!"

That, my friends, is the dreaded 'red slime', 'blue-green algae', or more accurately, Cyanobacteria. Let's start this off with some clarification – Cyanobacteria is a bacteria, not an algae as it's commonly construed. This is very important, if for no other reason than to understand how every medication that 'cures' cyanobacteria works. However, we'll get to that later – no reason to muddy up the waters now. This bacterium is so common and so prevalent that it quite literally exists everywhere in nature. Ever noticed after a few weeks of good rain in the summer how you'll see muddy puddled patches that are slicked over with a slimy-looking substance? You guessed it: Cyano. All types of aquaria, in fact, pretty much anything wet, is not safe from cyanobacteria. With more time to evolve and adapt than almost any other specific species it is clear that we've got our work cut out for us if we're going to tame the beast. No need to fear, however, there is hope, and I will show you the way!

The main key here is pretty much the siren song of conscientious fish-keeping – Nutrient control is central to your efforts! Test kits are fantastic, and let you understand a lot of what is going on in the tank, but it's unfortunately impossible for an ammonia, nitrate, nitrite, or phosphates test kits to truly paint a picture of what's really going on. These tests will only provide details to the *free* levels of whatever you're testing for. Simply put, the aquarium is if you are seeing the growth of nuisance algae, these are present enough to feed them. Always remember, marine aquaria is a practice in balances. The specimens you keep, the foods you feed, the natural ebb-and-flow of benthic life within your live rock all produce nitrogenous waste. This wll be present, in some form – nitrates/nitrites from fecal material, phosphorous from frozen food packing materials, nitrates/nitrites from decaying/uneaten food... this cannot be avoided.

A man wiser than myself once stated, "The solution to pollution is dilution." Water changes, water changes, water changes – this is preached by the advanced aquarists to the new, and with good reason. No matter what form of filtration you utilize, no matter how big your skimmer is, no matter how many different specimens of algae you utilize in your refugium, the wastes are NOT exported until they leave the system. Our little world-in-a-box is a closed system, regardless of how many openings we may drill through the walls. Removal of Chaetomorpha is the completion of the exporting cycle, likewise with cleaning the skimmer cup, or changing your mechanical/chemical filtration media. However, none of these can compare to the sheer volume of wastes that you can remove when you dutifully and purposefully remove these wastes in a systematic manner. Don't take this the wrong way – any/all of the above forms of filtration are typically essential for success. They all perform towards the same means, but they should all be secondary to your main tool for success – good old elbow grease. It is my personal opinion that you will see far more benefit from a weekly maintenance routine, than a bi-monthly, or monthly routine. Depleted wastes will be replenished more readily, and wastes are given far less time to accumulate and become unreachable. Five to 10% a week is my personal regimen, though 25% every 2 weeks can be well-maintained if you are diligent.

2010 Board of Directors Elected

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(Hobogato)

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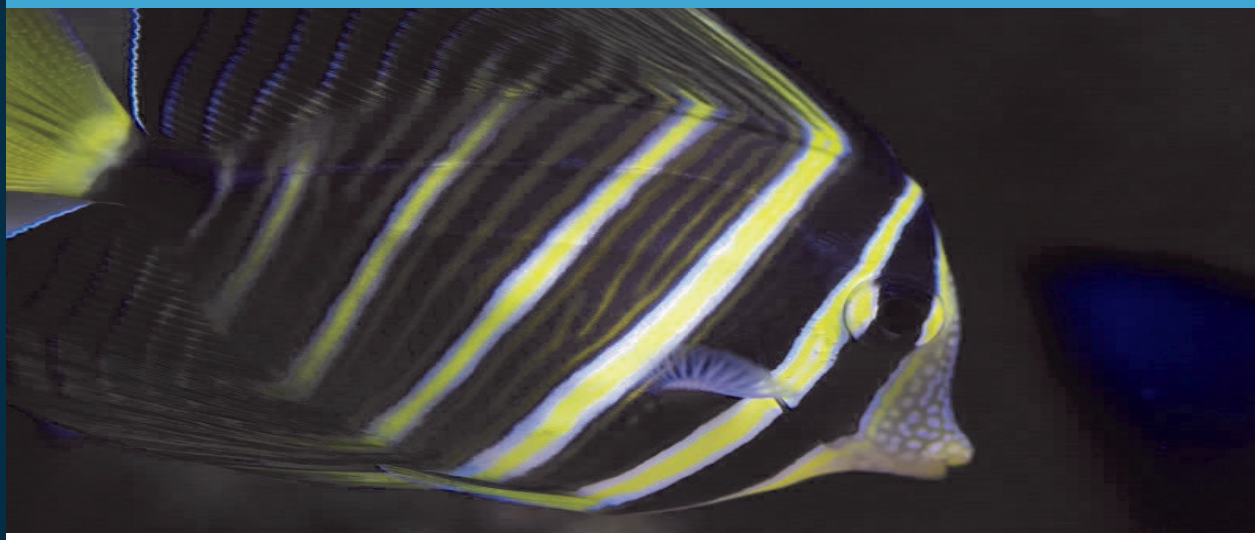
Allan Laviers
(Allan)



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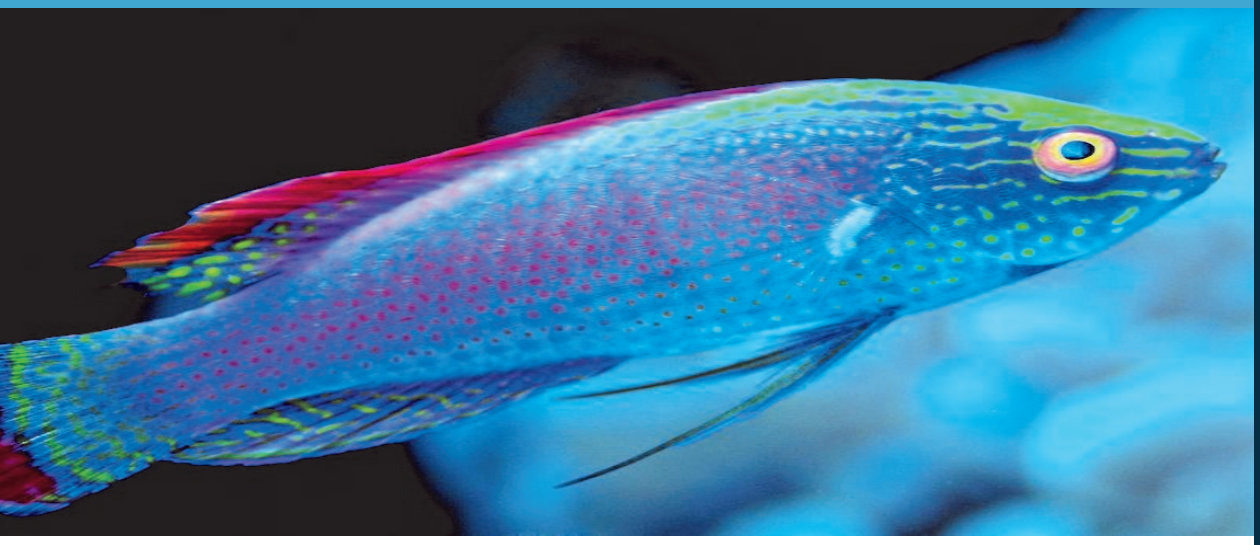
Let's take another look at the filtration – you may have noted that I said that the filtration is "typically essential" to success. I qualify this statement with "typically", because there are a great number of people who have great success while utilizing no filtration methods whatsoever. These people are typically well-versed in how to maintain a tanks, and understand how to not introduce more than the system can more than adequately handle. Thoroughly rinsing prepared foods, maintaining fewer fish than you would typically see, and heavy use of biological filtration, such as live rock, deep sand beds and beneficial algae, are the keys here. These methods, while far from a 'traditional' aquarium filtration configuration, provide what is needed through the denitrification methods above. By keeping the nutrient import low, the system is much more manageable with simple water changes. Your sump, refugium, and skimmer serve the same purpose, but provide the capacity to manage a larger bioload without as much concern. The same principles used by these advanced aquarists utilizing no separate filtration system are of as much benefit when applied by those who stock a more typical reef display – heavy load of fish and Cnidarian life. Rinse your prepared foods and if/when you feed flakes, feed them sparingly! If you see any visible food wastes, scoop/suck em out. A filter sock on the end of a typical substrate vacuum can be directed right back into your sump, so you can clean without actually changing water. Oversize your skimmer for your tank. It is much more difficult to under-skim than it is to over-skim and the main worry that most have for over-skimming, is the removal of bio-minerals. If you are doing your weekly water changes, this worry is immediately negated.... you see what I did there? Yep, I made the skimmer secondary to the water changes – because that's exactly what it should be. Your skimmer will be hard-pressed to be removing more useful minerals from your tank than you are replacing weekly in your routine.

Chemical filtration is beneficial when properly utilized. For our needs in saltwater, activated carbon is largely useless. If you'd like to employ these methods, look towards products such as Boyd's Chemi-Pure and Poly-Bio-Marine's Poly-Filter. These products are both well renowned for their beneficial abilities and are both quite tested and safe for all fresh and saltwater aquariums.

The other key that dis-favors cyano, but fortunately for us favors most things we typically wish to have in our care is thorough and liberal circulation. Cyano prefers stagnation, and when you can keep the majority of your wastes suspended before being filtered off, your chances of experiencing major problems are much reduced.

Beyond this, test for your main biomineral content (Calcium, Magnesium, Alkalinity, pH, etc.) often and you'll begin to understand a trend of your tank's usage – from what's going in to what's being consumed on a weekly basis. Keep these in your optimal zones and you should be golden.

Do note here, another qualifying term – "major problems". Remember how I stated before the amazing adaptability and over-abundance of this bacterium, this blight? Well, there's a big caveat to all of these export and control methods – you are bound to experience them somewhere. Everyone will, even if it's not visible in the display. It's not uncommon for overflows to have a light slick of cyano here and there there's a lot of air exchange right in this spot so the possibility of introducing airborne spores is significant. Cyano isn't the end of the world, its just a prevalent life form that will always have to be competed against. Prepare yourself for the battle and you will achieve victory.



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"...Well, that's great and all, but my tank ALREADY has the problem! Why'd you waste my time reading all this, I've already got the plague!"

Whoa, buddy, calm down there... breathe. Lets go back and review what has been discussed. The main keys are: to be deliberate and focused and overzealous when it comes to your maintenance routine. Manually remove the cyano often. If you don't want to change a ton of water, use the trick I mentioned before with the substrate vacuum and the filter sock. But while we're on the subject of "I'm wrist-deep in red/green goo already," lets go back to those quick fixes we mentioned before. Lesson one of this article, was that this is not an algae we are fighting, this is a bacterium, much more akin to an infection than an algae.

Cyanobacteria can be beaten. The downside here is 'bacteria" – the medications that will 'cure' cyano are indiscriminate biocides. Their goal is to kill bacterial life. They don't know if your beneficial bacterium are desired or not, they only know to kill. Every time you dose these medications, you are massively shocking your system's biological capabilities – just don't do it. It can be beaten.

So, in summary, keep up with your water changes. If there is one thing that you can do to keep your hobby an enjoyable one (and trust me, we've all been there – you want to yank your hair out when you're stuck in a rut) is keep up with your regular maintenance. Don't let too much waste accumulate in filter socks or other mechanical filtration methods and rinse them regularly. Suck out the gunk in your sump regularly. Blow the wastes free with a loose power-head in your display and remove during water changes regularly.... That's really all there is to it. If you don't look for the quick fix, and just make the whole process part of your routine, it can quickly become far more rewarding of a hobby. As time goes on, the work involved in your water changes will diminish, without the quality degrading – both because you're getting better at it and likewise because you're taking the time to ensure optimal conditions. Just keep things stable and keep it simple – don't over-think things and you'll do fine.

Now Aiptasia, that's another story...

Written By:
Justin Norman aka (Corruption)

Newsletter Needs You!

We need writers!

Now, a lot of you think you can't write an article -but we're not only looking for advanced topics here, we need beginner's stories, tips, product reviews, and more!

Send us your thoughts any and all are welcome.

Looking forward to working with you.

Sincerely
The Newsletter Committee.

December Birthdays

December 8
EDAWGM

December 13
Kristy

December 15
EDK

December 20
Mrsbigbird123

December 27
Txmaverickmh

Picture of the Month Winner

ScorpiNo

My POTM submission is that of a spiny boxfish. I have had this fish for 2 1/2 years. This fish in particular has much lighter coloring and more blue than any other spiny box I have ever seen before. Thus the reasons that prompted me into purchasing it.

It feeds on a standard FO diet, clams on the half shell, krill, PE Mysis, and brine shrimp. It's also a very personable fish, probably due to being hungry all the time. It's like a teenage boy, eating you out of house and home. That look is the "Feed me PLEASEEEE!" look. :)

Erik (aka) ScorpiNo

Upcoming Events

January 16, 2010

GCReef,
Corpus Christi, Tx
1-3 pm
Brad Gemmell, PhD candidate, Univeristy of Texas Marine Science Institute
"Creating Reef Biotopes"
followed by a short tank tour of some Corpus Christi tanks

This Month's Aquaria Q&A ...

Question: What are some of the methods employed to develop and maintain healthy pod populations?

Answer: Macro algae in the sump allows a safe haven for pods to live and multiply. Pods will come in on live rock and display pods will grow and multiply providing no predators live food in the display. Mandarins are a popular pod predator. To keep pods safe in the display tank you can use rubble rock or crushed coral that will be used as a haven for the population to grow. Additionally, pods will be delivered from the sump via your return lines, providing the water is not routed through a UV sterilizer.

EYE ON IT
Species Spotlight

The Harlequin Tusk originates from the reefs of the Indian Ocean and Australia. Indian Ocean Tusks have orange stripes with white margins and a hint of blue adjacent to the tail of the fish. Australian Tusks have orange stripes with vivid blue margins starting from the pectoral fin, along the fishes back to their tail. Both of these beautiful color forms have bright blue teeth or tusks used to crunch invertebrates. They are a wonderful fish for a FOWLR (Fish Only With Live Rock) aquarium. These fish are typically shy when at a small size, but will in time gain personality and confidence as they mature.

A 125 gallon or larger aquarium with plenty of live rock for hiding places and moderately aggressive, active fish such as Angels, Tangs, and smaller Triggers is an acceptable environment. Keep only one specimen per tank. Although they will not bother corals, they will eat any small crustacean such as snails or crabs.

The Harlequin Tusk Wrasse diet should include vitamin enriched frozen mysis shrimp, vitamin enriched frozen brine shrimp, and other meaty foods along with a high quality marine flake and marine pellet food

Information/Photos were compiled with permission from www.liveaquaria.com.

BECOME A CHARTER MEMBER TODAY

Membership

Dues are $25 for the calendar year. These dues quickly pay for themselves by the discounts given that many local stores honor to MAAST members.

We are trying to make our club better, bringing more educational topics, more door prizes and raffle items, and guest speakers. We also have the routine maintenance items like the website, food for meetings, membership dues to national marine organizations, and print/ publication fee's. Membership dues allow our club to keep afloat. and make all of this possible. As always, the website portion of the club will remain free.

Why collect dues?

1. Keeps MAAST afloat.
2. Funds club meetings so host does not have to pay for all out of pocket.
3. Allows for an image gallery on MAAST website.
4. Extra funds go into pool for "expert" speakers at the meetings.
5. Higher quality raffles, higher quality meetings, higher quality club!
6. Eligibility to run for a club office or be appointed to a committee.
7. Eligibility to VOTE!
8. Discounts at participating LFS's and online vendors.
9. A membership card
10. A voice to represent aquarists' interest.

For more information concerning Charter status, please read our By-Laws.

The membership dues are $25.00. Payment can be made either at the meetings, online via PayPal, or with a check mailed to our PO Box below.

PayPal fee's can be sent to **treasurer@maast.org**

or via snail mail to:
MAAST
P. O. Box 780582
San Antonio, TX 78278

Please include name, sign-in name, e-mail, home address, and phone!

Thanks for everyones help and support with this great organization!

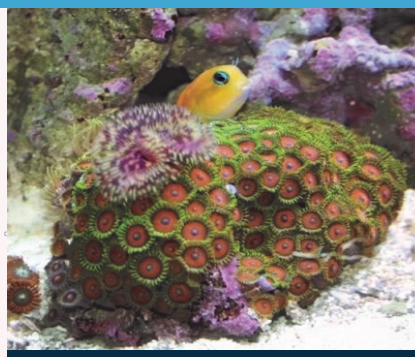

PHOTO CREDITS

P1 - POTM Winner– ScorpiNo

P2– Sailfin Tang– Princer7

P3– Green Wrasse– GreenMako

P4– Spiny Box Fish– ScorpiNo

P4– Refugium– Ping

P4– Clams– Orion

P4– Orange Sponge– PureTxn

P4- Leather– Paul28

P4– FTS –Princer7

P5– Starfish –Clone

P5– Blenny Zoa's– Bexarhunt

Helpful Tips:

Optimum Levels	
pH	8.1 - 8.3
Specific Gravity	1.026
Alkalinity	8 dKH
Calcium	450 ppm
Magnesium	1350 ppm
Nitrate	0
Phosphate	0 - .01 ppm