ISSUE
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MONTHLY NEWSLETTER FOR MAAST MEMBERS

THE MAASTARD

A NOTE FROM THE EDITOR

Hello fellow reefers,

I hope this note finds you all in good health and your reef & FOWLR tanks thriving.

January was an exciting month, with the announcement of the 2010 Board of Directors and a newly appointed Secretary & re-appointed Treasurer. Congrats to the newsletter co-chairman Allan LaViers on his new position as Secretary, or Administrative Assistant, as he would prefer. Kudos go out as well to Sherri Ancira on her Treasurer appointment. This year's Board of Directors is like no other. Our common goal is to take MAAST to higher levels of educating our members with lots of events, and meetings for all to enjoy.

In Addition, MAAST held its first meeting of the year in Corpus Christi. It was held at one of our very own sponsor's stores. Dr. Mark and his crew at Gulf Coast Reef (GC Reef) were very generous in offering their facility to MAAST.

This meeting included an excellent presentation on creating reef bio-topes by Brad Gemmell, a PhD candidate of the University of Texas Marine Science Institute. A special thanks to GC Reef for your continued support of MAAST and its members.

In the event you would like to contact me you may do so via pm.

- Eve Vialpando

(Pennies2cents)

JC February POTM Winner 2010

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Hungry Little Dragons
By Karin Baker

Would you get a pet cat with the intent of having it sustain itself solely on rodents it finds in your backyard? Probably not.

Our backyards tend to be rather small and rodent population is subject to fluctuation. It also is simply very satisfying to have a direct input on an animal's well-being and form a special bond by feeding it. The same is true for most of our aquatic pets. Our tanks are rather small, closed systems compared to the wild. The fauna in our tanks may be subject to fluctuations.

Even the tiniest fish soon learns when to expect food from its caregiver. And yet we still often hear that we should rely on the fauna in our comparatively small systems to nourish a fish with an astonishingly high food requirement: the Dragonet, or as it is commonly known, the mandarin. Even in larger systems with abundant live rock, this approach seems rather risky. If all goes well there will always be enough copepods to sustain a dragonet. But what if it doesn't go well? Many people assume the introduction of another pod predator is the only risk to an existing pod population but fluctuations are not uncommon even in established systems without obvious predation.

I once managed to decimate my tank's fauna by about 90% by dosing high amounts of magnesium to rid my tank of Bryopsis. The Bryopsis went away, but with it went most of my copepods. What a relief it was at that time to know that my dragonets would readily accept frozen foods. More and more aquarists are refusing to rely on natural pod population alone to sustain their dragonets.

One of the most influential people in this trend has been Matt Pederson of the website Marine Ornamental Fish and Invert Breeders (MOFIB) who developed a system to 'wean' dragonets onto frozen foods. At the heart of this system, is the idea that dragonets should be held in a small tank or breeder basket rather than released into the display tank right away. This of course goes contrary to conventional wisdom, which urges people to skip quarantine with dragonets and introduce them to the display tank right away to ensure access to food. In a small area such as a breeder basket or 10 gallon quarantine tank, it is much easier to expose and condition the fish to new foods.

Dragonets do not graduate to the display tank until they vigorously accept frozen foods. Pederson's approach includes the use of live brine shrimp, followed by enriched frozen brine shrimp. The idea is that the current in the tank would pin the brine shrimp against the breeder basket netting and the mandarins would eat them off the net much like they eat pods off the substrate.

This actually did not work very well for me. The netting on my breeder baskets is so small that even right in front of a power head I never gained enough flow to actually pin the brine shrimp against the net. In my effort to follow this tried and true system, I came across decapsulated hatchable brine shrimp eggs which have proven to be a successful first step in my mandarin weaning process. All of the mandarins seemed instantly attracted to the decapsulated eggs. As an added bonus, those eggs that didn't get eaten hatched into baby brine shrimp.

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POTM WINNER: JC

ABOUT THE PHOTO

This tank was created with the intention of adding it to my new baby's nursery. As a responsible parent, it is my duty to start him off on reefing early. So what better way than with a seahorse tank with Hippocampus Reidi.

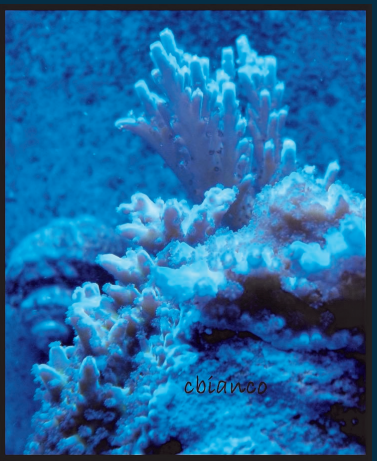
The tank is a 34 gallon Solana made by Current USA. I decided to go with PC lighting so as not to overwhelm the Seahorses. The flow was also lowered by changing the stock pump to a Maxi-jet 600 with a Hydor flo rotating deflector. I switched the skimmer to a recirc model from Sapphire. As for feeding, the seahorses get a cube of mysis shrimp twice a day.

February Birthdays

Feb 1 - Corruption

Feb 1 - J_G

Feb 1 - Ray Allen



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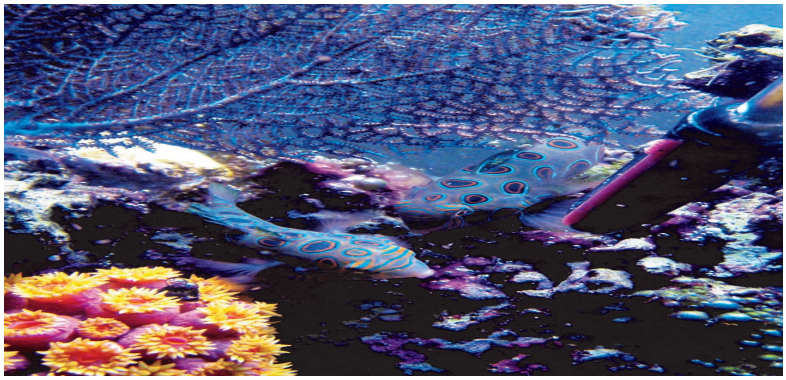
My original plan was to follow Pederson's recommendation to start with live adult brine shrimp and then wean them onto enriched frozen brine (enriched with Super Selco to make it more nutritious). Although my mandarins rejected both live and frozen adult brine, the Selco seemed to assist in the process by:

(a) flavoring all foods similarly

(b) making it easy for them to sense the food in the water

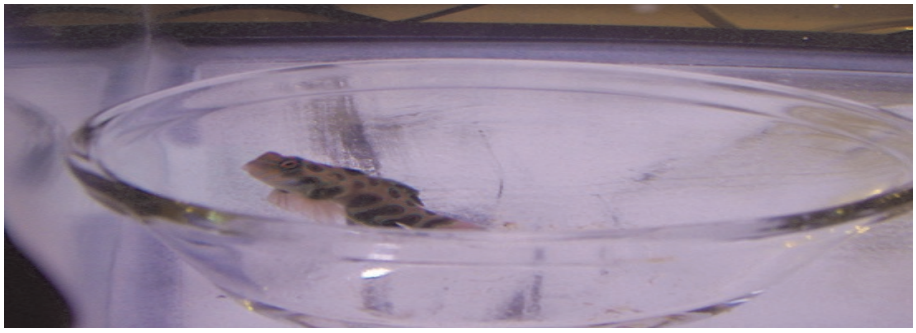
Small bloodworms and prawn eggs became their favorite food. They soon started to recognize my feeding tool and once they were eagerly accepting frozen fare it was time to release them into the display tank. Below is my pair of Target Mandarins waiting for their food to be dispensed into the tank.



Another benefit in training the mandarins in a small tank is that most are quite emaciated by the time they arrive at the LFS. Under the controlled environment of a small tank it is easier to manage their body condition. Matt Wittenrich, the first person to breed large numbers of mandarins in captivity, suggests live mysis shrimp for severely emaciated dragonets. Again this did not work well for my dragonets. The mysis seemed much too fast for my slow moving, skinny fish. The decapsulated brine shrimp eggs were much easier for them to catch.

Are you thinking of adding a pair now that the food supply is well ensured? Well think again. As Wittenrich says: survival is a higher priority than mating. Mandarins, especially spotteds , can be very assertive in defending their territory and are only willing to share it and start spawning when food supply is abundant.

Many fishkeepers with spawning pairs report having to feed at least two or three times a day. Ideally live foods occurring in the tank along with frozen foods build a system that allows for near constant grazing. After my pod population was decimated by my bryopsis treatment, I quickly became aware of this fact. My male became more aggressive towards my female and for the first time his chasing actually escalated into leaving bite marks on the female mandarin. During this time I fell back on something I employed during their training: a feeding station. See the picture below: A tiny mandarin in a small soufflé bowl.



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In the 10 gallon quarantine tank they had quickly become accustomed to a small glass bowl. Unfortunately due to the higher flow in the display tank this solution was not adequate there. Instead I had a custom feeding station made out of acrylic by Ace Shedd (hobogato) that allowed me to deposit larger amounts of frozen food for the mandarins and retrieve the leftovers safely a few hours later. See picture below: A male mandarin trying out the acrylic feeding station.

At the same time I was also dosing phytoplankton relatively heavily and the pod population began to rebound fairly quickly. Even with frequent feedings and a good supply of microfauna, it took about 3 months for my current pair of dragonets to stop bickering and truly start grazing and roosting together. Others have experienced faster success. Be aware that the dynamics can change again as food supply changes. Females appear to prefer larger males and pairings tend to work out best when a male larger than the female is chosen or at least two fish of similar size. Pairings of a small male with a large female often don't work out well. According to Matt Wittenrich there are differences in behavior between *Synchiropus picturatus* (target mandarins) and *Synchiropus splendidus* (green / red mandarins). While it is possible to keep them together theoretically, in practice it is much easier to keep a pair of dragonets that 'speak the same language' and display the same social behaviors.

In my observations green / red mandarins *(Synchiropus splendidus)* are both easier to sex as well as more docile, and may be a better choice for an aquarist interested in keeping a pair. In nature no true pair bond between male and female mandarins exists. Male *Synchiropus* tend to be ready to mate every day while females develop eggs over the course of several days. This discrepancy of interests may lead to further quarreling in the home aquarium setting depending on the male's persistence. Of course when the thorough care and forethought does work out, the pair is a sight to behold. Watching a spawning ascent in the actinic glow right before lights out or finding your pair of spotteds *(Synchiropus picturatus)* roosting at night in the same rock is priceless. But please consider all of the implications before attempting to keep two in a tank. One very happy mandarin is better than two miserable ones.

In summary the steps to successful dragonet keeping are:

- Do not rely on microfauna alone to sustain your fish.
- Train your dragonet to accept frozen foods vigorously BEFORE releasing them into the display tank.
- Think carefully about the added feeding requirements and potential aggression issues of a pair before purchasing a second mandarin.
- Consider the differences between the *Synchiropus* species.
- Introduce only very well-nourished male/female dragonets to each other
- If severe fighting occurs, consider the possibility that you may have two males (and you must permanently separate the two).
- If fighting between a known male and female escalates to include physical damage to one of the mandarins, increase your feeding frequency or employ a feeding station.

- Karin Baker
(Europhyllia)

Newsletter Needs You!

Writers for the newsletter committee

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 beginners' 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

Education Committee

With extremely high hopes of further educating the entire community of MAAST, we would like to announce the newly developed education committee . It will be managed by Jack Watkins (txav8r) and serving on the committee are Allan LaViers (Allan) and Justin McKay (Justahobby).

EYE ON IT

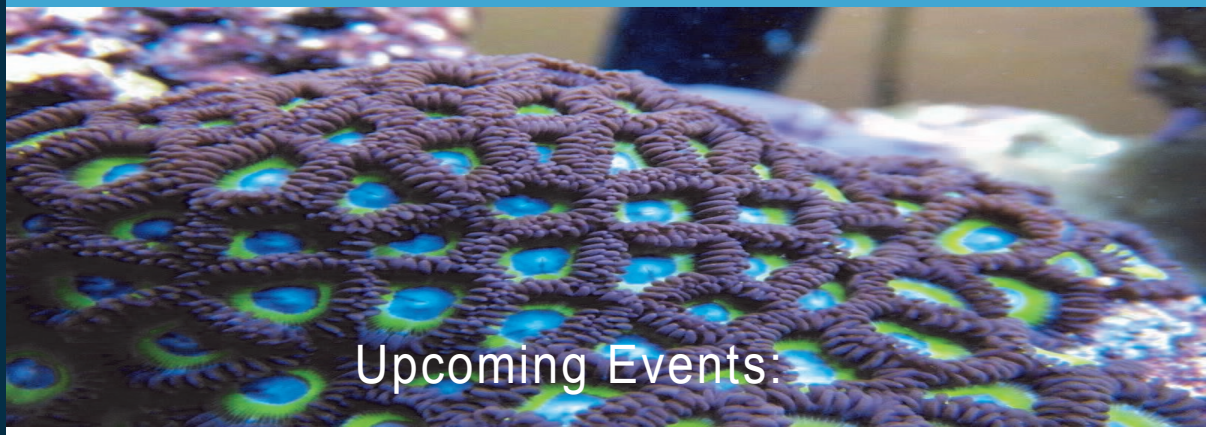
Species Spotlight

The Zebra Barred Dartfish is also referred to as the Zebra Dart Goby, Bar Goby, Barred Dartfish, Zebra Goby, or Chinese Zebra Goby. Both the head and body of the Zebra Dart Goby are light green. Its attractive slender body has numerous vertical, evenly-spaced thin orange stripes displaying an intricate pattern.

A tank of at least 30 gallons or larger with a sandy bottom, plants, and coral will provide a healthy environment. Small groups or pairs tend to do better in an aquarium than a single individual, but all need to be introduced to the tank simultaneously and have plenty of swimming room.

The meaty diet of the Bar Goby should include fresh or frozen seafood and brine and mysis shrimp.

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



Upcoming Events:

March 14, 2010

March Frag Swap

2pm—5pm
Hamilton Community Center
10700 Nacogdoches
San Antonio, TX

April 10, 2010

San Antonio Zoo Event

6pm-10pm
After hours zoo access, Guided tour
of Aquarium by zookeeper,
Dinner in banquet hall

May 22, 2010

Feeding your reef:

"How to grow your own phyto, artemi, and rotifers"
Presented by: Ace Shedd
1pm-3pm
Madison High School, San Antonio, TX

July 23-25, 2010

Port Aransas Collection Trip

Speakers & Timess TBA

Port Aransas, Tx

This Month's Aquaria Q&A ...

Q: I'm setting up my new seahorse tank, but I've heard protein skimmers can have negative effects. Is this true?

A: While its been long thought on the hobbyist level that the microbubbles and extreme oxygenation provided by protein skimming causes gas bubble disease, this has been shown to not be the case with further investigation. Recommendations from most experts -- breeders, hobbyists and researchers alike -- state that a skimmer is not only beneficial, but highly recommended.

- Justin Norman
(corruption)

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 - JC: February POTM Winner

P2 - JC: February POTM Winner

P2 – cbianco: SPS Shot

P2-3 – Europhylia: Mandarin shots

P4 – Gseclipse20: Zoas

P4 – txg8gxp: Acans

P5 – cbianco: Nano Tank Shot

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