

# THE FILTER

TAMPA BAY  
AQUARIUM  
SOCIETY

25  
Years



ST. PETE/TAMPA  
FLORIDA



*Symphysodon  
aequifasciatus*  
- Melon Discus

May 2019  
Volume 28 Issue 10

TBAS . . . Since 1992



# TAMPA BAY AQUARIUM SOCIETY

## "THE FILTER"

Tampa/St. Pete, Florida

# TBAS

## TABLE of CONTENTS

# TBAS

Click on Title to go Directly to Item

3) President's Stuff	Dre Alvarado
4-10) My Koi Pond Filter Design	Ludo Van Den Bogaert
11) <b>Membership Dues</b>	<b>TBAS</b>
12-13) Meet the TBAS Member - <b>Gary Foster</b>	Gary Foster
14) <b>Angels Plus Videos</b>	
15-16) Patty Talks	Patty Moncrief
17) Angelfish & Eggs - Video	
18) Random Shots	Mike Jacobs
19-22) TBAS Supporters	TBAS
23) TBAS Officers	TBAS
24) TBAS Information	TBAS



Hey Everyone.

May is already here and spring is upon us. This time of the year is great for getting outside and fixing up your water garden. The club has asked two of our members and past presidents Ken Friesen and John Papp, to discuss their our outdoor ponds. We will have a workshop style meeting this month. Both speakers will present at the same time on opposite ends of the room. You will have the opportunity to hear both speakers when you switch sides.

It is also a great time of the year to get out and collect fish. The mornings are still cool but the fish are active. Dont forget to post your pics of your trips on our facebook page.



*Dre*

Dre Alvarado, President TBAS

*Puntius rhombocellatus*

**Snakeskin Barb**

Photo by Mike Jacobs 2019

To Table of Contents



# MY KOI POND FILTER DESIGN

**By: Ludo Van Den Bogaert**

My original DIY koi pond was completed in 2001. It consisted of a shallow (18-inch deep) wetland/small fish area and a koi pond (3-feet deep). The total water volume was about 6,000 gallons. This setup worked well, except the filter system needed improvement and the shallow area kept losing fish due to wildlife invasions.

After I retired and maybe to help accept my retirement, I remodeled and hopefully improved the koi pond. The total water volume increased to about 10,000 gallons. This required the abandonment of the wetland area and the digging of a deeper pond area at this same location (removed over 100-wheel barrows of soil but that is another story) and the complete reconstruction of a new filter system. This article only deals with the construction of the new filter design. I estimated that this pond would require about 4-filter units and based on the current fish bio load, the number of filter units seems to be sufficient.

## **CONSTRUCTION MATERIAL CONSIDERATIONS:**

### **Do NOT use these materials:**

- Pressure treated lumber has chemicals that leach out into the water and is poisonous to the fish.
- Cedar lumber for me only lasted about 2 years. It became very soft and lost its

**To Table of Contents**

structural strength.

- Steel corroded & failed very quickly under the wet pond conditions.

### Use these materials:

- Aluminum is okay but seems to oxidize. Under certain conditions it can be toxic to fish.
- Plastic, such as PVC, plexiglass or acrylic.
- Stainless steel
- All bolts/fasteners will need to be stainless steel or plastic.
- Rubber material such as EPDM pond liner, not the roofing type.
- Concrete with a water proof coating.

### CONSTRUCTION:

1. Obtained four 100-gallon plastic Rubbermaid stock tanks from Tractor Supply.
2. Installed filter divider in the tank. I had access to found PVC material. This divider needed to fit securely against the sides of the tank. Note this divider included supports for the egg-crate filter material, **Photos 1 & 4**.
3. Drilled holes for the inflow pipe, outflow pipe, and sludge drain.
4. The sludge drain was attached, **Photos 5 & 6**.
5. The inflow and outflow pipes were attached, **Photo 3**.
6. I installed an air agitation loop in the bottom of the filter. This consisted of ½ inch PVC piping with small holes drilled at regular intervals. I drilled the holes on the bottom side with the idea that they would be less likely to get clogged with sludge. It requires a shop compressor to get enough air flow to agitate the filter media. (No photo)
7. Cut the egg-crate material to fit the shape of the tank and installed, **Photo 2**. Note that the stock tank had a built-in perimeter support ledge for the egg-crate material. To make sure that the egg-crate would not fail in the center, I included a short PVC pipe support in this area. **Photo 2** shows one of the PVC supports.
8. Installed the filter at the proposed location. I desired to have a gravity flow into the filters, so the tanks were installed into the ground. The literature that I read stated that it was better to have a gravity flow into the filters so that suspended solids would not be ground into smaller particles by the pump.

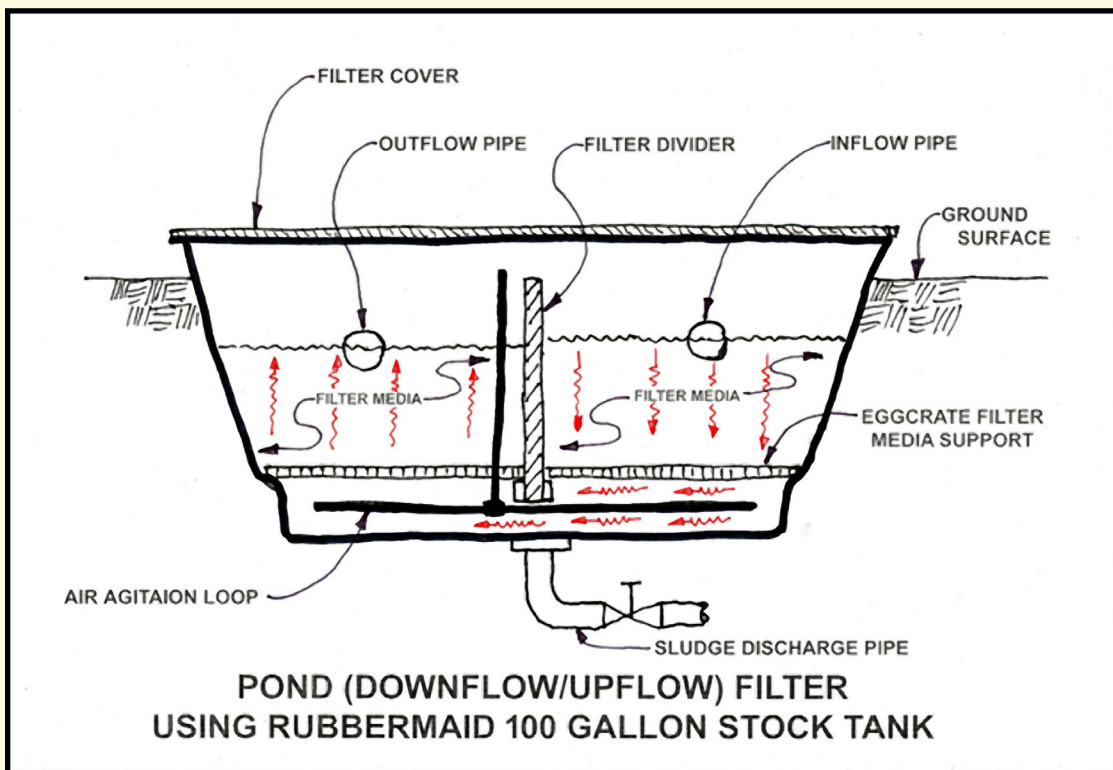
**FILTER MEDIA CONSIDERATIONS:**

- Lava rock is cheap but difficult to maintain and clogs easily.
  - Bio-balls are probably best but expensive.
  - Shredded PVC is a good material, but I couldn't figure out how to keep it from passing through the egg-crate media support and clogging the pump intake.
- I have some bagged material, but it allows some of the flow to pass around the bags and this appeared less efficient.
- Other possible materials: sponges, orange fence webbing, plastic screening, etc.

My filter currently contains a mixture of lava rock, bio-balls and shredded PVC in bags. In the future would like to eliminate the lava rock and replace it with shredded PVC and/or Bio-Balls

**FABRICATION AND INSTALLATION:**

See diagram and photos that follow

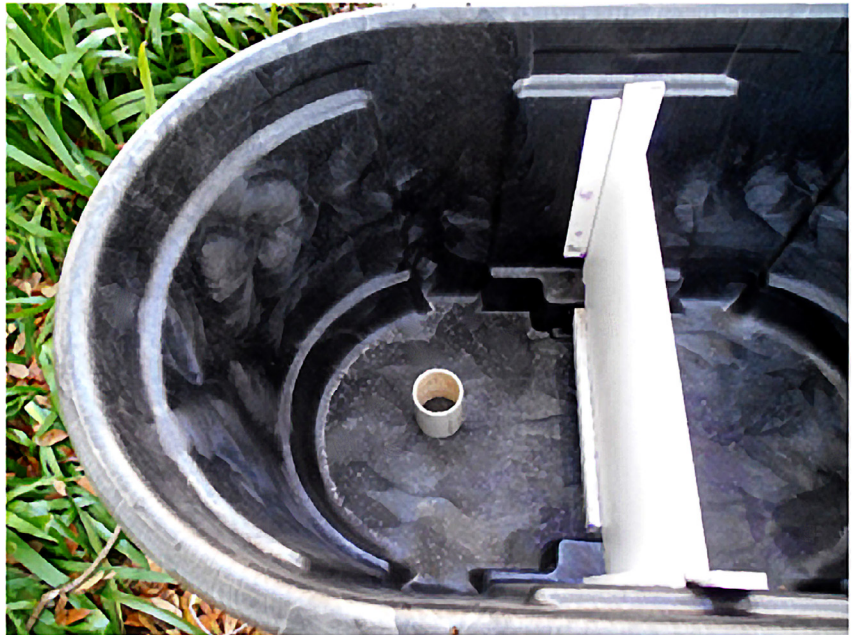


**OPERATION AND REGULAR MAINTENANCE:**

The filter generally takes very little maintenance. Sludge from the fish waste accumulates in the bottom of the filter and on the filter medium. To suspend the accumulated sludge, I agitate the sludge with air to loosen the

sludge on the filter media and to also suspend the sludge that has settled on the bottom of the filter. After enough air agitation the filter water is discharged through the sludge discharge pipe. I usually repeat this operation at, east twice to remove as much sludge material as possible. The water from the pond is used to refill the filters and the automatic pond float fill valve refills the lost pond water.

**Photo 1:** Tank with PVC divider



**Photo 2:** Tank showing divider & egg-crate bottom (one PVC support missing also no holes drilled).



**Photo 3:** Ready for inflow/  
outflow piping.



**Photo 4:** Shows how  
divider is inserted





**Photo 5: Preparing to install sludge drain.**



**Photo 6: Installed sludge drain**



**Photo 7:** 2015 - Filters under construction.

**Photo 8:** Recent photo of the filter system. Oval structures are the filters, small round structures are the valves, structure with the circular dome is the pump.



**Photo 9:** View into a filter. This one has bio-balls, lava rock, and shredded PVC.

# MEMBERSHIP DUES!!!!



Membership Dues for TBAS are due on the anniversary of your sign-up date every year. Please make sure you check the “sign-in” list on the table at every meeting to check your “Dues-Date” . . . Thanks!!!

**USE PAYPAL ON THE TBAS WEBSITE . . . TBAS1.COM . . . !!!!!**



Gary Foster

# Meet the TBAS Member ... from Nebraska

Hi, my name is Gary Foster and most of you have no idea who I am. I have only been in the club for a few years. A couple of years ago I realized that if I was to meet anyone and get to know them, I needed to become more involved in the club. So I decided to put my name in the pool of nominees for the Board of Directors. Lo and behold I was elected. Little did I know at that time that the club was looking for new blood and I fit that category. Last year when new officers were elected, nobody spoke up for the office of Secretary. I decided, why not, how hard can it be? Wow, do I have a new respect for anyone who does this type of work. On the plus side of this adventure, I have got to know many members and it has been fun.

I am from Lincoln, Nebraska, born and raised there. I spend several years in the Army, mostly overseas in Germany after high school. Upon returning to Lincoln I went to college at the University of Nebraska. During my time in school my roommate gave me a 15 gal aquarium. It had a pink Crystal Craze background, you ask what is that? It came in a bottle and you painted or poured it on the back of the tank. When it dried, crystal formed instant background (some of you may even remember it). The tank also had bright blue gravel, colorful plastic plants and tacky ornaments. UGH!! My roommate was friends with a guppy breeder and he had some awesome fish and I was lucky to get a trio. Well you know how this goes, one tank led to two tanks, led to four tank, led to eight tanks, etc, etc, etc. Soon I moved into angelfish, then breeding angelfish. My hobby turned into a business selling angelfish to many stores in the area and helping to pay for my college education. Also during this time I worked at a miniature Walmart type store running their pet department, thus honing my business skills and expanding my horizon with birds, small animals, reptiles and their related supplies.



Gary at a TBAS meeting!

After graduating from college in business administration, I decided to open

my own pet store in 1978. I used a Small Business loan from the government and I was on my way. Three years later I open my second store and three years after that I opened my third store. During this time I opened a small wholesale fish business and had a parakeet breeding operation. We also had our own dry good warehouse and sold products to many local shops. I was living my dream, married to my beautiful and talented wife Sheri and had two boys. But as my boys got older and were involved in sports and other activities, 60-80 hour work



Gary at his personal tanks now!

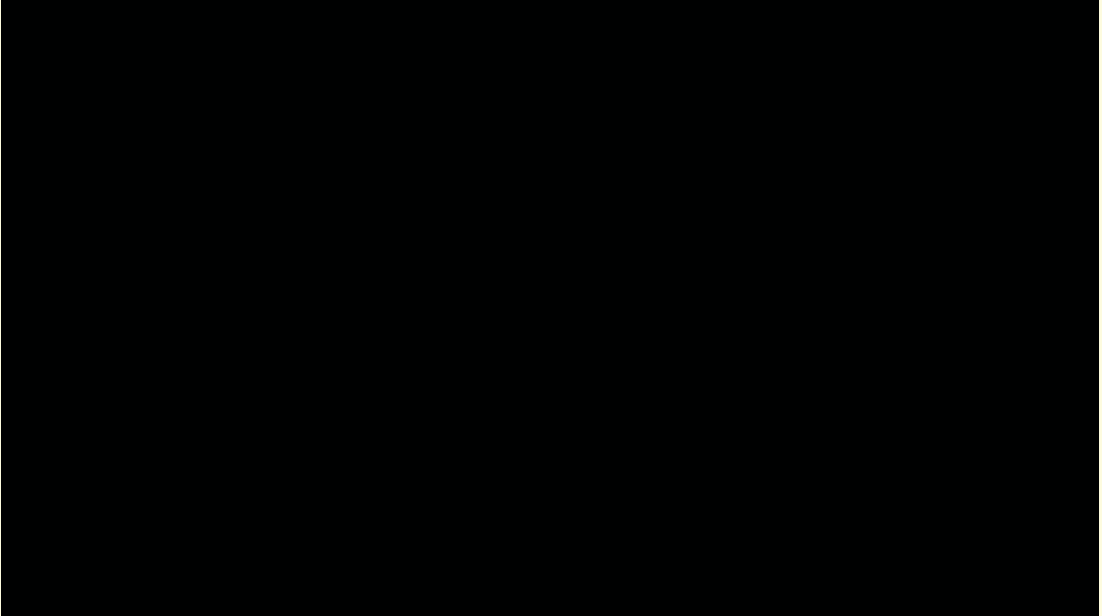
weeks were hard on us. I wanted to coach their teams and be apart of their lives. My wife, who was a very integral part of the operation, and I decided to sell the stores and the wholesale operations and take more normal jobs. So we went to work a large pet wholesale operation. During my time I functioned as a buyer and later as a territory sales manager. Over the years I have had a wide diversity of pets from the usual dogs and cats to the more exotic types. I have had a number of birds such as Macaws, Amazon Parrots, Cockatoos and Toucans. Two Red Foot Tortoises lived in the house along with ferrets and a wide variety

of reptiles. It was the classic zoo but we loved it.

When I retired to Florida I bought a number of tanks and set them up in my garage (wife will not let me do this in the house, to many water accidents or so she claims). I currently have about 20 tanks. I was a cichlid guy, but recently I diversified into many other types of fish. Also I have gotten into aquatic plants and I really enjoy it. Recently I have had the opportunity to obtain some my favorite childhood pets, Turtles. I now have Red Foot Tortoises, aquatic, mud, musk and side neck and wood turtles. Who says you can go back time.

Back in Lincoln I was involved in a club called the Great Plains Aquarium Society. We put on an annual show at a local convention center. As a club we had built racks and had an air system. The racks were wired, so all the people had to do was bring their tank and set it up. It was very similar to what we do at the State Fair, but just on a bigger scale. We also had a large number of tanks for bettas and guppies. The shows generally had about 500 entries and we gave out trophies and ribbons. It was a lot of work, but really fun.

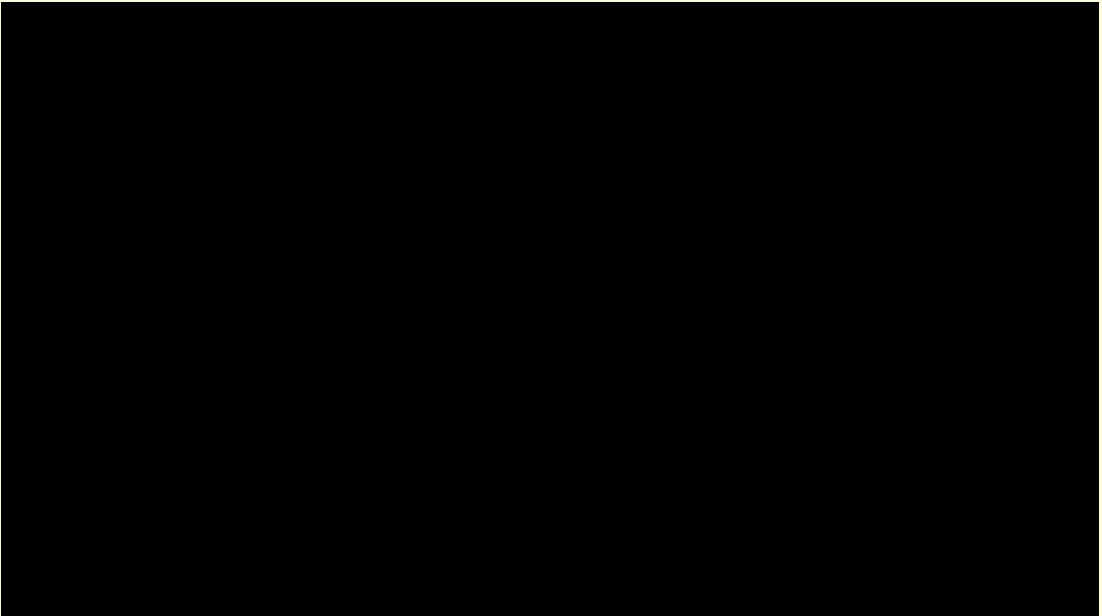
After settling down in Florida, I wondered if there was an aquarium club in the area. I found Tampa Bank Aquarium Society online and started attending meetings. But that was not enough and I knew I wanted to be more involved. Here we are today and it has been everything I hoped it would be and more. If you want to find me at the meetings, I am the tall blond (now silver . . . see the photos above . . . 😊 😊) haired guy. Thanks for listening and I hope to meet more of you in the future.



Click on the



to See Video



**THE BEST KOI ANGELFISH IN THE UNIVERSE**

To Table of Contents



## Can't We All Just Get Along?

One of the biggest problems that new and old fish keepers have is getting their fish to get along, even when they are only keeping one species. To complicate matters what works for

one person may not work for someone else. Tank Size, the habitat, food and water quality are all factors in fish compatibility. But, sometimes you will run into a fish that does not fit its profile. This can be caused by inbreeding, poor nutrition during egg development or a number of other factors. These fish can be either big bruisers or real wimps, but these are exceptions to the rule.

There are many books that try to give compatibility guides but they often all short. Here are some simple rules that you can follow that will help you select the right kind of fish so your tank will be a more "peaceful" place.

The first thing you need to know is how big the fish will get. Hopefully your fish store will have books you can look at (if they don't have any reference material, I would worry about buying any fish at that store). Once you know how big the fish will become, then you will know if you have the right-sized tank for it and any tank mates of similar size you might want to put with it. **NO! FISH DO NOT GROW TO THE SIZE OF THE TANK!** This is the biggest fallacy in the hobby and if someone tells you that, they don't know what they are talking about! A fish's mouth size will tell you a lot too . . . big mouth predators should not be kept with small fish. Large fish with small mouths can be kept with smaller fish.

The next thing you need to know are the water requirements. Do you need hard or soft water, warm or cold? Maybe this fish needs a higher pH or lower pH. You can't mix fish that have very different water requirements because it is inevitable that someone will be unhappy.

Does the fish need to be in schools, pairs, harems or alone? What if you purchase barbs? They like schools and are very unhappy in pairs and will nip and pick at each other and other fish unless kept in groups of six or more. Perhaps your male won't get along with a single female but needs a harem. These are

**To Table of Contents**

things you must consider.

Food is not something that many people think of when considering compatibility, but take, for example, the seahorse. Seahorse and related pipefish eat only live food and eat it very slowly. Most fish you keep with them will eat all the food before they get a chance, even though they won't harm the seahorses. Don't mix vegetable-eaters with live plant tanks. Many fish have special food requirements so keep this in mind when mixing different kinds of fish.

Activity level and habitat go together. Active fish need swimming room and many sedate fish need hiding places. Often the very active fish will make slower fish nervous, but sometimes they are used with more aggressive fish to distract them from fighting with each other. And what do YOU want? Do you like fish darting and flashing about are more sedate, slow movers? Some predators are sedate until food goes by. Don't let that fool you. Be sure they fit the other rules too.

This article is meant to provide some guidelines and just because the fish you pick match all rules doesn't mean they will all get along. Sometimes you have to change the tank around or add more fish for distraction or add more habitats. There will always be exceptions to the rule and remember each fish has its own personality. Until next month, keep those fish happy.

---

# Aqua Research Center

Water Analysis & Interpretation  
[www.aquaresearchcenter.com](http://www.aquaresearchcenter.com)

by Joe Gargas  
 Ph: (813)645-1717

---



<http://www.sks1.com>

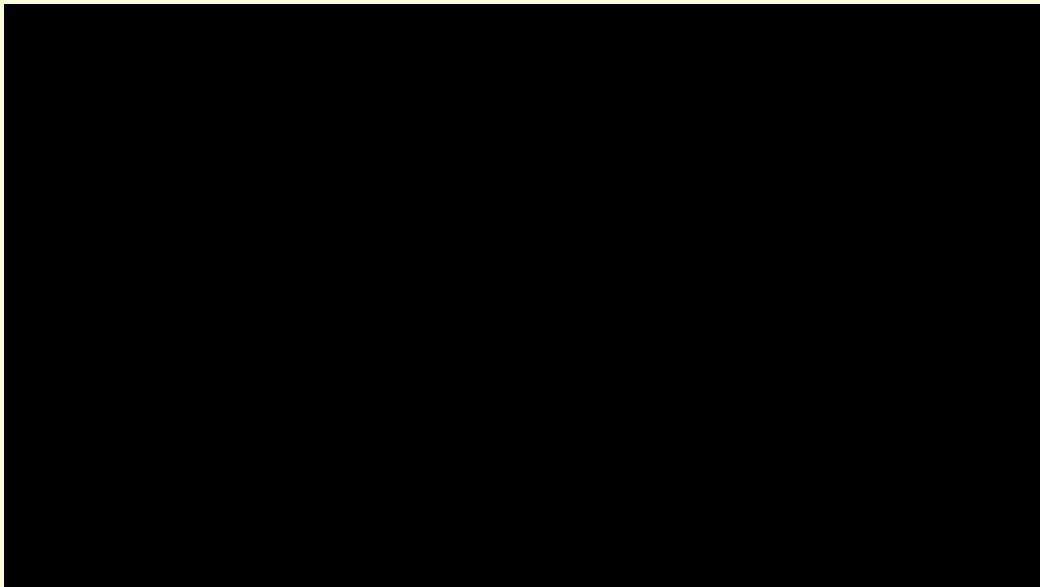
**Did you ever think of KILLIFISH???**  
**Come find out about them at the**  
**SKS meetings!!! See the ad to**  
**the left!**



# Angelfish & Eggs



Angelfish & Eggs Video [Click on the](#)  [to See Video](#)





***Tetraodon palembangensis* . . . Humpback Puffer**

photo: Mike Jacobs 2019

[To Table of Contents](#)

# Supporters of TBAS

## Tampa Bay Wholesalers: Tropical Fish

**alphabetical order**

- 1) 5D Tropical Fish
- 2) Segrest Farms

## Tampa Bay Fish Farmers:

**alphabetical order**

- 1) Amazon Exotics
- 2) BioAquatix
- 3) Carter's Fish Hatchery
- 4) FishEye Aquatics
- 5) Golden Pond
- 6) Imperial Tropicals
- 7) Lile's Tropical Fish
- 8) V-W Tropicals



**BRINE SHRIMP DIRECT**

TANK TESTED PRODUCTS



YOUR DIRECT SOURCE FOR ALL OF YOUR TROPICAL FISH FEED REQUIREMENTS - FROM FROZEN FEEDS, FLAKES AND PELLETS TO ENRICHMENT PRODUCTS, FREEZE-DRIED FOODS AND, OF COURSE, BRINE SHRIMP EGGS.

**INTRODUCING SLOW SINKING FRESHWATER PELLETS**

(WITH ASTAXANTHIN FOR VIBRANT COLORS)

FOR CLUB DISCOUNT, USE THE FOLLOWING CODE AT CHECK-OUT: **TBAS5**

[www.brineshrimpdirect.com](http://www.brineshrimpdirect.com)

TOLL FREE 800-303-7914

# VORTEX

Innerspace Products





**Aquarium  
Pharmaceuticals**



[www.FluvalAquatics.com](http://www.FluvalAquatics.com)



[www.pythonproducts.com](http://www.pythonproducts.com)



Website: [www.jbjlighting.com](http://www.jbjlighting.com)





**MARINELAND**

**Tetra** 




**COBALT**  
AQUATICS

**FTFFA** FLORIDA TROPICAL FISH FARMS ASSOCIATION  
**CO-OP STORE**



5129 State Road 674 • Wimauma, FL 33598  
 Phone: 813-938-1162 • Fax: 813-938-1163  
 E-mail: [ftffacoop@tampabay.rr.com](mailto:ftffacoop@tampabay.rr.com)

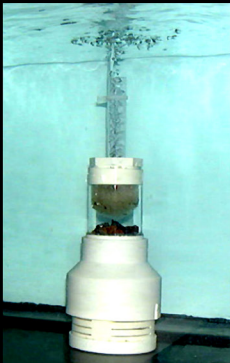


*Aqua Research Center*  
 Water Analysis & Interpretation *by Joe Gargas*  
 Ph: (813)645-1717

**Joe's WATER Book**



**Joe's ROCKET FILTER**



[www.aquaresearchcenter.com](http://www.aquaresearchcenter.com)

**LIFEGARD**  
 AQUATICS  
 Aquarium, Pond & Aquaculture Products



# TAMPA BAY AQUARIUM SOCIETY OFFICERS



**PRESIDENT**  
**Dre Alvarado**



**V. PRESIDENT**  
**Randy Hann**



**SECRETARY**  
**Gary Foster**



**TREASURER**  
**Patty Moncrief**

## BOARD OF DIRECTORS



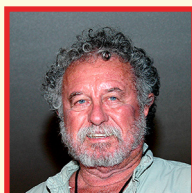
**Joe Gargas**



**Mollie Howell**



**Mike Jacobs**



**Bill Shields**



**Al Starkey**



**TBAS**

**Tampa Bay Aquarium Society  
St. Pete/Tampa, Florida**

**Website: [www.tbas1.com](http://www.tbas1.com)**

**FORUM: [www.tbas1.com/forum](http://www.tbas1.com/forum)**