

# 108 Years of Educating Aquarists THE PRESIDENT'S MESSAGE



June is the end of our fiscal year and we ended it with a bang. Cameron Provost of House of Fins, in Greenwich, CT. was our speaker and his topic was "Rare Marine Fishes in the Aquarium Hobby." It was not only educational but entertaining as well. It

appears that there are many marine fish that few of us ever see and for a multitude of reasons. It was a great talk. House of Fins was generous by donating marine and fresh water fish species. Thank you very much!

We had our election of Officers and Board members at the June Event and there were several changes and some positions remain open. We are still searching for a Treasurer, a Recording Secretary, a videographer and a few positions remain open on our Board. Please step up and help us out, without you helping us we can't do many of the things our members want.

We wish all our members, along with friends and family a fun filled and relaxing summer. We will return again in September to educate and entertain our members in all areas of aquatic life.

Our next event will be on Friday, September 13 and Tullio Dell Aquila will be our speaker. His topic for the evening will be *"The Facts of Light: A scientific approach to comparing light sources for aquarium use"*. Our livestock auction of plants, fish and marine corals, along with aquatic equipment and supplies will immediately follow his educational presentation. Doors open at 7:30.

Please refrain from selling or purchasing any items from individuals on site at the aquarium, it is strictly prohibited.

We have new BAS shirts and BAS hats, get yours at the September Event while supplies last.

Remember, we can always use help. If anyone wants to help out in any way, please let us know. See me personally or any officer or board member. If anyone has any topics they want to hear expert speakers on or any specific speaker, please tell us that also

We would like to thank our members and our sponsors for their constant generous donations that keep us going. We always welcome donations from anyone who has aquatic items, supplies, equipment, and healthy livestock of fish, corals or plants.

For information on upcoming speakers or to leave a message for us please call our **BAS Hotline at 718-837-445**5 and visit our updated website at

#### WWW.BROOKLYNAQUARIUMSOCIETY.ORG.

On a more personal note – any member who wants to attend a Board meeting, held at Education Hall, NY Aquarium, on the first Friday of the month, September through June, please notify me at 347-277-4793.

#### Thanks and see you in September!



# This Months Speaker

**Tullio Dell Aquila** has been a professional lighting designer for almost two decades. His pioneering work with high power LED's spans numerous commercial, automotive, and aquarium applications. As an avid aquarium hobbyist, he will readily admit his true passion has always been designing high quality aquarium lighting products. From LED moonlights to the first enhanced spectrum, and actinic led lighting systems, his pioneering work

with LED'S continues to influence our industry today. But his contributions to aquarium lighting do not stop here. His work with specialized reflector systems, advanced thermal design, and high efficiency microprocessor controlled electronic ballasts, have helped revolutionize metal halide, and fluorescent based aquarium



lighting products as well.

Tullio Dell Aquila has dedicated much of his career to educating others about the exciting possibilities that LEDs and other lighting technologies offer to our industry.

Tullio's topic will be "Aquarium Lighting Fact and Fiction" A scientific look into the fascinating world of aquarium lighting. On a side note the talk will be relevant to both Marine/Reef and Freshwater Planted systems. Tullio will bring

his Spectrometer and other light meters to do a live demonstration during the talk.

Friday, September 13 will be your luckly day if you have a reef tank or a planted tank and would like to learn more about the importance of lighting in these tanks. This is a great talk to kick off our new season of BAS Events.



### **DIRECTIONS TO THE NY AQUARIUM**

**Directions by Car**: Take Belt Parkway to Ocean Parkway South (Exit 7S). Take Ocean Parkway approx. 1/2 mile. The New York Aquarium will be on your left. **Directions by Subway**: Take either the Q or F trains to West 8th St, NY Aquarium Station. **Follow signs to NY Aquarium**.

#### All BAS meetings begin at 7:30 pm.

No members, other than those donating their help setting up or items for the auction, will be allowed in before that time.

# Brooklyn Aquarium Society CALENDAR OF EVENTS 2019 - 2020

We're back from vacation searching for great new speakers. We hope you have a great summer... see you all at the September Event. The BAS Board

**SEPT 13 Tullio Dell Aquila - Aquarium Lighting: Facts and Fiction** ~ Followed by an auction of marine fish, aqua-cultured corals, freshwater fish, plants & dry goods.

**OCT 11 Giant Fall Auction -** Marine fish, aqua-cultured corals, freshwater fish, plants & dry goods. **NOV 8 Lou Ekus - [Tropc Marin] Reef Chemistry Made Easy** ~ Followed by an auction of marine fish, aqua-cultured corals, freshwater fish, plants & dry goods.

DEC 13 Holiday Party ~ Members, their families & friends • Fish Bingo & Prizes • BAS awards presentations. 2020

JAN 10 Luis Morales - Fish Photogarphy ~ Followed by an auction of marine fish, aqua-cultured corals, freshwater fish, plants & dry goods.

**FEB 14 Joe Yaiullo** [topic TBA] Followed by an auction of marine fish, aqua-cultured corals, freshwater fish, plants & dry goods.

MAR 13 Jason D'Ambrosis - Stingray Husbandry ~ Followed by an auction of marine fish, aqua-cultured corals, freshwater fish, plants & dry goods.

APR 12 Robert Stark - 25 Years of B-Ionic Reef Keeping and the Simplicity Beyond Complexity ~ Followed by an auction of marine fish, aqua-cultured corals, freshwater fish, plants & dry goods. MAY 8 Giant Spring Auction ~ Marine fish, aqua-cultured corals, freshwater fish, plants & dry goods. JUN 12 Chad Clayton - Copepods are Changing the Face of Aquaculture ~ Followed by an auction of marine fish, aqua-cultured corals, freshwater fish, plants & dry goods.

NO MEETINGS JULY & AUGUST

**SEPT 11 Harry Faustmann - Live Foods** ~Followed by an auction of marine fish, aqua-cultured corals, freshwater fish, plants & dry goods.

OCT 9 Giant Fall Auction - Marine fish, aqua-cultured corals, freshwater fish, plants & dry goods. NOV 13 TBA

DEC 11 Holiday Party ~ Members, their families & friends • Fish Bingo & Prizes • BAS awards presentations.

# **REGIONAL SOCIETY EVENTS**

### CHECK ALL TIMES AND DATES BEFORE ATTENDING

If listed **TBA** (TO BE ANNOUNCED), the Society has not gotten a speaker or has not updated their calendar of events. Before attending a meeting please check their web site for more information.



### TUESDAY SEPTEMBER 3 - PIONEER VALLEY AS • TBA

Meets 1st Tuesday of the month at The First Congregational Church, 20 Lathrop St, West Springfield, MA @ 7:00 pm. Free parking in lot. Public welcome. Info: Jacob Guinasso, jguinasso@pvas.net or Martha Morris, martha\_morris@hotmail.com. or pvas.net

#### WEDNESDAY SEPTEMBER 4 - GREATER CITY AS • TOM KEEGAN - SPAWNING VARIOUS TYPES OF TROPICAL FISH

Meets the 1st Wednesday of the month @ 7:30 pm at the Queens Botanical Garden, except for January and February. The public is welcome. Speakers, publication, bowl show, raffles, door prizes, refreshments, plant and fish auctions.

Info: Claudia Dickinson at: ivyrose@optonline.net or (631)-668-5125, or www.greatercity.org

### THURSDAY SEPTEMBER 5 - BUCKS COUNTY AS • TBA

Meets the 1st Thursday of the month except August. Meetings start @ 7:30pm doors open @ 7:00 pm, at the Churchville Nature Center, 501, Churchville Lane, Churchville, PA. Annual membership is \$20 for single membership, and \$10 for each additional family member who wishes to have voting privileges and the ability to participate in the BAP program. Info: **bcasonline.com** 

#### FRIDAY SEPTEMBER 7 - LONG ISLAND REEF ASSOCIATION • TBA

Meets the 1st Friday of the month @ 8:00 pm at Acan Lighting, 75 Austin Blvd, Commack, NY 11725.

Info: http://www.LongIslandReef.org

#### TUESDAY SEPTEMBER 10 - NASSAU COUNTY AS

• TBA

Usually meets the 2nd Tuesday. of the month at Molloy College., 1000 Hempstead Ave., Rockville Centre NY @ 8:00 pm. General meetings open to the public. Guest speakers, fish related events, raffles, mini-auction. Info: **Mike Foran (516)-798-6766**, or at **info@ncasweb.org** or **http://ncasweb.org/directions.php.** 

#### THURSDAY SEPTEMBER 12 - TROPICAL FISH CLUB OF BURLINGTON • JEFF CARDWELL - COLLECTING IN SOUTH AMERICA

Meets the 2nd Thursday of the month at the VFW Hall, 73 Pearl St., Essex Junction, VT. Meetings start @ 6:30 pm. Door prizes, bowl show (warmer months), monthly auction, fish discussions and a good time! New members are welcome! Info: **David Banks** at **dbanks@together.net** or **www.tfcb.org** 

#### THURSDAY SEPTEMBER 19 - NORWALK AS • JEFF MICHELS - APISTOGRAMMA

Meets the 3rd Thursday of the month @ 8:00 pm at Earthplace, The Nature Discovery Center, 10 Woodside Lane, Westport, CT. Open to public. Info: Norwalkas.org

#### FRIDAY SEPTEMBER 20 - LONG ISLAND AS • TBA

Meets the 3rd Friday of the month at SUNY Stony Brook's Maritime Science area, Room 120 in Endeavor Hall (After you enter building, take hallway on the right. Room 120 is first room on the left) on the State University at Stony Brook Campus, Stony Brook, NY 11794. Doors open @ 7:30 pm, meeting starts @ 8:00pm. Speakers, auctions, refreshments, free parking.

Info: www.liasonline.org

#### SATURDAY SEPTEMBER 21 - NORTH JERSEY AS • TONY TERCIERA - KILLIFISH HUSBANDRY/FISH PHOTOGRAPHY

Meets the 3rd Saturday of the month 12:30 pm sharp at the Clark Public Library Union County just off the Parkway at exit 135. NJAS one of the largest and most well respected aquarium clubs in North America. Since 1953, NJAS has provided a friendly outlet for the exchange of aquarium-related ideas and information and recognizes the accomplishments of local hobbyists. Info: www.njas.net/

### TUESDAY SEPTEMBER 24 - GREATER HARTFORD AS • TBA

Meets 4th Tuesday of the month @ 7:00 pm at the Lutz Children's Museum, 247 S. Main St., Manchester, CT. Info: (860)-643-0949

#### TUESDAY SEPTEMBER 24 - BIG APPLE GUPPY CLUB

• **TBA** Meets: the last Tuesday each month (except Jan, Feb, July, and August) @ 7:30 to 10:00 pm. Alley Pond Environmental Ctr., 228-06 Northern Blvd., Queens, NY. Info: **Donald Curtin (718) 631-0538** or **twindon1** @aol.com

#### WEDNESDAY SEPTEMBER 25-METROPOLITAN AREA KILLIFISH ASSOC. • TBA

Meets 4th Wednesday of the month @ 8:00 pm at the Meadowlands Environmental Center, Lyndhurst, NJ. Speaker and auction of fish eggs, plants and dry goods. Refreshments served. Info: **SLMACK@compuserve.com** 

#### FRIDAY SEPTEMER 27 - DANBURY AREA AS • MARK DENARO - NAMO AQUARIUMS 101

Meets the 4th Friday of the month @ 7:30 pm at Laura Sprain Memorial Cornerstone park, 1 Fair St. Carmel, NY 10512. Info: Rich Litsky (845) 228-0372 or Joe Masi (845)-896-4793 or daas@northeastcouncil.

#### SUNDAY SEPTEMBER 29 - JERSEY SHORE AS • ANNUAL FALL AUCTION

Usually meets the 2nd Monday of the month at the South Wall Fire Rescue Co., 2605 Atlantic Ave., Manasquan, NJ. @ 7:30 pm. Speakers, auction rare & exotic fish, aquatic plants, door prizes. Info: www.jerseyshoreAS.org; or (732)-859-5595 or mws71@yahoo.com



**SEPTEMBER 13 - 15 KEYSTONE CLASH** held at Clarion Hotel and Convention Center, Harrisburg West, 148 Sheraton Drive (PA Turnpike Exit 242), New Cumberland, PA 17070. Rates are \$68 per night with free breakfast. For reservations (632) 432-0765. The Clash has quickly grown to become one of the largest all species aquatic show, speaker convention and hobby get-together in the United States. The Clash brings you: 4000 square ft. fish show featuring 49 show classes of all aspects of the freshwater tropical fish hobby. Acclaimed speakers; Dave Ramsey, Dr. Thomas Waltzek, Dr. Paul Loiselle, Rusty Wessel, Jennifer Williams, Joey Mullen, Rachel O'Leary. Raffles, silent auctions. Welcome Social Awards ceremony. All day auction Sunday starting @ 11:30am. Give a Kid a Tank Sponsorship.Vendor room. Room sales. Hospitality



room. Giveaways, and more to be announced. The Keystone Clash is presented by the Aquarium Club of Lancaster County and the Cichlid Club of York. **For Info: KeystoneClash.com** 

OCTOBER 4, 5, 6 - NEW ENGLAND FANCY GUPPY ASSOCIATION -FANCY GUPPY SHOW held at Ramada Inn, 213 Taunton Ave., Seekonk, MA. The giant auction will be held on Sunday. Free admission. For info: www.newenglandguppies.org or E.T.Mellor, Amherst MA 413-549-0478

OCTOBER 6 - POTOMAC VALLEY AQUARIUM SOCIETY FALL AUCTION held at the Green Acres Center, 4401 Sideburn road, Fairfax, VA 22030. 9:30 am Registration opens 10:30 am Tag Sale opens 10:45 am Bidding opens 1 pm First Raffle 3 pm Second Raffle Bidding continues until all items are sold, generally ending around 4 pm. For info: http://catfishcon.com/#

**OCTOBER 12 - 13 - AQUATIC EXPERIENCE 2019** held at Meadowlands Exposition Center, 355 Plaza Drive, Secaucus, NJ 07094. From saltwater to freshwater with pond and aquatic animals. Consumers and retailers are invited to join us for educational seminars. Hobbyists from entry level to the most sophisticated aquarium keepers. Livestock and equipment experts and the industry's best and most trend-setting manufacturers.

For info: aquaticexperence.org

OCTOBER 13 - ALLEGHENY RIVER VALLEY AQUARIUM SOCIETY ANNUAL AUCTION held at the John Ash Community Center, 112 N. Barry Street, Olean, NY, starting at 11 AM. Anyone can buy and/or sell. All items being sold must be tropical fish keeping hobby related. For info: www.arvas.org OCTOBER 27 - NORTH JERSEY AQUARIUM SOCIETY FALL AUCTION held at Days Hotel, Route 18, East Brunswick, NJ. Aquarium supplies and equipment, freshwater tropical fish and aquatic plants. For info: http://www.njas.net/

OCTOBER 27 - ERIE AQUARIUM SOCIETY FALL AUCTION held at Perry Hi-Way Social Hall, 8221 Oliver Road, Erie, PA 16565. More info to follow.

NOVEMBER 2, 3 - INTERNATIONAL GUPPY CONFERENCE - GUPPYCON III held at Stonehill College, Easton, MA 2019. Join us to celebrate the 10th Anniversary of Guppy Enthusiasts of New England (formerly Boston Guppy Club). Donations are encouraged. Admission to both days of the convention including presentions and talks are free and open to the public! Hotel Information. Attendees are booking rooms at the Motel 6 in Brockton

about 3 miles from campus. Rates are about \$80 per night. Hotwire.com is also currently offering a \$60 per night deal less than 10 miles from campus. (A major hotel chain but you have to book it to know which one.) You may use the Stonehill College discount at several area hotels. https://www.stonehill.edu/visitors/area-accommodations/ Book your accomodations early as rates rise quickly in the fall! For more info: Bostonbreeders@BostonGuppyClub.com

NOVEMBER 22, 24-25th ANNUAL OHIO CICHLID ASSOCIATION EXTRAVAGANZA held a the Holidy Inn, Strongville, 15471 Royalton Rd, Strongville, OH. This three day event celebrating cichlids and catfish. Holiday Inn, 15471 Royalton Road, Strongsville, Ohio 44136, Phone: 440-238-8800. The hotel is conveniently located at I-71 and Route 82, just 10 minutes south of Cleveland Hopkins International Airport. Room rate (registered attendees): \$74.00 per night (up to four people per room). Book by calling the hotel directly at 1-440-238-8800. Overflow rooms available at the Super 8 - Strongsville, Ohio, 1-440-238-0170. Registered attendees will see world class speakers; Hans Georg Evers, Ad Konings, Oliver Lucanus and Melanie Stiassny. Manufacturer booths, vendor booths, a large fish show, a hospitality suite and fish being sold throughout the hotel. Saturday features a swap meet, informal awards dinner and an auction with brand new goods donated by aquarium manufacturers. There will be a Kid's Tank Decorating Event and silent auctions. The family-friendly weekend culminates in an awesome fish auction on Sunday, where over 1,000 bags of cichlids and catfish are sold.

For info: http://www.ohiocichlid.com/extravaganza.extravaganzainfo



The editor takes full responsibility for misspellings and punctuation errors.

# A NEW BOOK FROM A LEGEND IN THE HOBBY

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# An Aquarist's Journey



**R** osario La Corte is one of the world's leading authorities on breeding fish and he has written numerous articles and books, contributing greatly to our understanding of fish and their habits.

Now, for the first time, here is a compilation of his travels, aventures, successes (and very occasional failures) all relating to collecting, keeping,

and breeding fish, and in his own words (and edited by *Modern Aquarium's* Editor, Dan Radebaugh).

Available in softcover at Amazon.com

\$29<sup>50</sup>

# THE FOLLOWING MADE GENEROUS DONATIONS TO THE JUNE AUCTION. THANK YOU!

### INDIVIDUALS

David Lund Kai Nguyen Scott Peters

Victoria Silverstein Dennis Vadaro Robert John Wranovics

### STORES & MANUFACTURES

- Brooklyn Zoo & Aquarium, Brooklyn, NY
  - Empire Reef, Brooklyn, NY
  - House of Fins, Greenwich, CT
  - Monster Aquarium, Queens, NY
  - New York Aquarium, Brooklyn, NY
  - Pacific Aquarium & Pet, New York, NY

# JUNE NEW AND RENEWING MEMBERS



The Brooklyn Aquarium Society is a federally registered 501(C) (3) nonprofit organization. Your gift is tax deductible to the fullest extent of the law.

# **BAS** ELECTIONS

### OFFICERS & BOARD MEMBERS ELECTED AT THE JUNE EVENT



- President:
- Steven Matassa
- 1st Vice President: Gennady (Gene) Kogan
- 2nd Vice President: Marie Licciardello
- Recording Secretary: **Open**
- Treasurer: **Open**
- Membership Chairperson: **David Manuel**
- Corresponding Secretary: **Dan Smith**
- Sgt. At Arms: Lita Goldberg
- Exchange Editor: Alissa Sinkler

BOARD MEMBERS:\* William Amely Denver Lettmen Kay Martin Leon Perry Wayne Sinckler Bob Strazzulla Larry Whitfield

\*5 Board members are to be elected by the membership. 5 more are to be selected by the President and approved by the full Board. \*Web Master: **Bernard Deren** \*Editor: **John Todaro** \*Webmaster & Editor are appointed by the President & approved by the Board.

We really need a Treasurer and a Recording Secetary. If you are intrested in helping the Society please contact me for information and details on these positions Steven Matassa at (347) 277-4793

HELP US UPDATE OUR ARCHIVES

We need someone who can edit the videos we make at our speaker events and upload them to our account on Vimeo.

Please contact Joe at (917) 922-5108.

We have an archive of our guest speaker videos from as far back as 1995. We make these videos so that members who could not attend the meeting or wish to refresh their aquatic skills can watch and learn from the speaker's topic. Our mission since 1911 is Educating Aquarists!

### BAS MEMBERS CAN BUY & SELL ON THE BAS FORUM

Any BAS member can place a free ad to sell or to buy any fish type item. The item to sell or buy is to be entered into the BAS Forum which is located on our BAS website: http://WWW.BrooklynAquariumSociety.org. The Forum entry point is located on the top right side of our websites main page.

**The Brooklyn Aquarium Society Inc**. is a non-profit organization 501(C) (3) for people interested in the aquarium hobby and the study of aquatic life. The Society meets the 2nd Friday of each month except July and August at the Educational Hall of the NY Aquarium at Coney Island, Surf Ave. at West 8th St., at 7:30 PM. Meetings are open to visitors. Membership is \$25 per year family, \$20 individual, \$15 for students under 18. Send inquires or membership checks to **Brooklyn Aquarium Society, c/o Membership Chairperson, P.O. Box 290610, Brooklyn, NY 11229-0011.** 





### OCEAN WONDERS AT THE NY AQUARIUM

**SHARKS** Over 115 marine species, 18 different kinds of sharks and rays, an unforgettable experience. The Donald Zucker and Barbara Hrbek Zucker Ocean Wonders: Sharks! the exhibit brings some of the most misunderstood animals out of the depths and nose-to-nose with you!

**CORAL REEFS** Sometimes tunnel vision is a good thing. Like when it puts you smack dab in the middle of this colorful coral reef, surrounded by blacktip reef sharks, butterflyfish, and zebra sharks swimming above you.

#### DAILY SCHEDULE

10:00 AM - Aquarium Opens110:30 AM - Penguin Feeding 15 minutes111:00 AM - Aquatheater Show 15 minutes211:30 AM - Sea Lion Feeding 15 minutes311:45 AM - Harbor Seal Feeding 15 minutes3

1:00 PM - Aquatheater Show 15 minutes 1:30 PM - Otter Feeding 15 minutes 2:45 PM - Harbor Seal Feeding 15 minutes 3:00 PM - Sea Lion Feeding 15 minutes 3:15 PM - Aquatheater Show 15 minutes 4:00 PM - Penguin Feeding 15 minutes 4:00 PM - Last Entry 5:00 PM - Aquarium Closes

### NEW PRODUCTS OF INTREST



**Tetra Betta Worm Shaped Bites** is a nutritionally complete worm-shaped food specifically tailored to the needs of bettas and other labyrinth fish. Designed to imitate the size, shape and color of natural bloodworms, the food floats on the water's surface to appeal to bettas by enticing their natural instinct to hunt.



LiveAquaria's new Professional Reef Salt Mix is formulated for all marine aquariums, including coral reef, fish with live rock and fish-only systems. It contains all essential major, minor and trace elements found in natural seawater. The mix is also enhanced with calcium, magnesium and potassium to support vibrant growth in reef

aquariums. Three sizes are available: 53-gal. bag, 180-gal. bucket or 205-gal. box.

MarineAndReef.com - Newsletter #246 May 23th, 2019





# Aquarium Plumbing Basics: Plumbing Terms

#### Metric & NPS

In the United States we describe plumbing size using the standard of NPS, which stands for nominal pipe standard. Nominal pipe standard is the approximate inside diameter of PVC pipe in a given size. For example a 1" NPS pipe will have an approximate inside diameter of 1", but the outside diameter is bigger and the fittings the pipe pushes into are bigger still. Let us emphasize that the inside diameter is nominal and is not exactly 1". To find what size pipe you have check the label printed on the pipe or the label printed in the fittings the pipe pushes into.

Sometimes you'll come across metric pipe. Metric pipe is common on equipment and aquariums manufactured overseas, and it is extremely difficult to find in the United States. When encountering metric pipe, it's best to convert the pipe to a US NPS standard size. We sell a variety of adapters that do this. Just like with the US standard, metric pipe is described by the nominal inside diameter. For the best accuracy when buying pipe, the pipe size is often printed on the pipe and fittings themselves. If your metric pipe came on a product manufactured overseas often the manufacturer will let you know what size pipe the product uses.



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### MPT or FPT

For threaded connections, MPT stands for male pipe thread and FPT stands for female pipe thread. Male pipe threads are always inserted into female pipe threads. The FPT/MPT standard is unique to the US and some overseas products will not use it. You can find the thread size printed on the fitting, or in the case of pumps with threaded connections the connection type will be listed in the product description and in the manual.

### Slip

Slip fittings are plumbing fittings that can accept pipe of a given size. For example, a 1″ slip x slip elbow is an elbow shaped fitting that 1″ NPS pipe can slip into. Slip fittings need to be glued with PVC cement.

### SPG/Street

PVC fittings that are labeled as SPG (spigot), or labeled as street fittings, fit into a slip fitting of a given size. For example, a fitting that is 1" SPG can fit inside a 1" slip fitting without pipe in between. SPG and street fittings do not fit inside of a pipe.

### Barb

Barbed fittings are designed to fit inside of flexible hose. The barb fits inside the hose so the size reflects the inside diameter of the flexible hose it fits into. A 1" hose barb will fit inside of a piece of flexible tubing with a 1" inside diameter.

### Loc-Line

Loc-Line is a proprietary product that only connects to itself using unique ball joints. ½" Loc-Line will only attach to ½" Loc-Line. To convert to Loc-Line you will need an adapter with a Loc-Line to MPT connection.

### ID and OD

ID and OD simply stand for inside diameter and outside diameter. In general, the inside diameter is used far more often to describe pipe and tubing than the outside diameter. Remember all plumbing sizes are nominal and aren't exactly the size they are labeled. Our 1" hose has a 1" inside diameter that will fit 1" hose barbs. The outside diameter is larger because of the tubing wall.











### SCD40 and SCD80

SCD 40 (schedule 40) and SCD 80 (schedule 80) describe the thickness of a PVC fitting or pipe. SCD 40 is the standard for regular home use and SCD 80 is thicker. Because it uses more material, SCD80 is more expensive. SCD40 fittings are fine for most aquarium applications, but we recommend SCD80 fittings in places where failure would be catastrophic. One example is a bulkhead fitting on the bottom of a 1,000-gallon aquarium on the 15th floor of luxury apartment. You really don't want that fitting to fail.

#### Nipple

A nipple is a fitting that has male pipe thread at each end. It is used to connect two fittings with female pipe threads.

### **Other Fittings**

We also carry ball valves, gate valves, adapters, elbows, tees, unions, suction screens, reducer bushings, hose clamps and many other plumbing parts. We will not discuss those because the names pretty much reveal what they are intended for.

### **Further Reading**

We encourage you to also read our other articles on aquarium plumbing. Understanding plumbing will save you time and prevent disasters, and it will also lead to an aquarium that is quieter and more energy efficient.

Please contact us with any questions you have.

sales@marineandreef.com

Toll-Free 877-878-9349 International 1-480-491-5283

Monday-Friday 8am-11:30am & 12:30pm-4pm MT

Note: We do not have daylight savings time in Arizona



# TIP OF THE MONTH

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Don't forget to check your aquarium after your summer vacation and remove dead leaves and detritus. Clean the glass sides and don't forget to clean the glass cover. The built up of algae on the glass top can cut down the amount of light and effect the growth of your plants.

Change the filter wool and do a partial water change. If you unplugged the heater at the start of the summer now is the time to plug it in. Check the heater to make sure the temperature is at the correct setting for your fish.

If you have a canister filter clean it to remove any detritus, makes sure you use lukewarm water so as not to kill all the beneficial bacteria.



# SHIRTS, HATS & PATCHES

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# **BAS T-SHIRTS** SMALL TO XL \$10 EACH PRICE VARIES ON XXL & LARGER SIZES

Historic Brooklyn Aquarium Society logo in gold on navy blue short sleeve T-shirt. White lettering states the society's mission...

### Educating Aquarists Since 1911



### A FEW BLACK BAS T-SHIRTS LEFT





OFFICIAL CAP. Blue with embroidered gold BAS insignia. One size fits all. \$10 each

OFFICIAL BAS embroidered patches that can easily be ironed onto any shirt, hat, jacket or article of clothing you wish. Only \$4 each



# BOOKS BY OUR TALENTED MEMBERS

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### P. M. GRIFFIN

**P.M. Griffin**, better known to us as **Pauline Griffin**, lives in Brooklyn, N Y, with her cat Nickolette and two tropical fish aquariums and devotes just about every 'spare' moment to writing, research, and reading.

Pauline is an award winning well known science fiction and fantasy writer with some 28 novels and story collections under her belt. She has now branched out and written a romance novel, featuring two farms, one purpose. Two hearts, one love, but there are difficulties in plenty to challenge any hope of a happy conclusion. You have to read this novel to find the answer.

EAGLE'S LEDGE is available in electronic format from the following sources: From the publisher,

MuseItUp Publishing, at

https://museituppublishing.com/bookstore/index.php/coming-soon/february-2018/eagle-s-ledge-detail# top Also available at: Amazon, Barnes &

Noble, ibooks, Scribd, 24Symbols.



**GRIFFI** 

# BOOKS BY OUR TALENTED MEMBERS

### JOE GRAFFAGNINO



The Saga of Mary & Ma Li is the final piece of a fantasy and adventure trilogy. A ruthless Chinese billionaire industrialist and his gorgeous homicidal maniac enforcer convince the leaders of China to support their plan to manipulate the world's stock markets and thus control the world. With China's political and military might behind them, it seems that nothing can stop their plan of world conquest. As fate would have it, their accountant is a CIA undercover mole operative. Mary and the Carrington Protection and Recovery Agency are hired by the CIA and the Chinese billionaire without each sides knowledge, to find and return the elusive agent and the secret documents he possesses that prove China's involvement.

The story unites modern China and feudal Japan in turmoil. Old enemies and new ones become allies to destroy Mary and Ma Li. Unknown to the spirit sisters, a bet between a demon and an archangel centuries before was the catalyst that created both Mary and Ma Li and the mystical swords that became their weapons. These same elements are needed by demons to open a chasm between the world of humans and the demon realm to start an unholy revolution.

Mary and Ma Li are thrown into a fight for survival in both the mortal and spirit worlds. Friends' loyalties are tested and enemies are forced to trust each other. Ancient prophecies are fulfilled, but not the ones written by man, but the original vows witnessed by long-dead spirits and enforced by demons and angels. The saga now comes full circle for Mary and Ma Li. The past and the present combine to decide their own fate. But, who will decide the survival of supportive friends, loving family, Mary's children?



### Ma Li & Mary

A bet between a demon and an angel created the existence of Ma Li, a 15th century warrior priestess and Mary, a 20th century Taoist experiences these two women endured; the battles they fought and the

priestess. The trials and experiences these two women endured; the battles they fought and the people they met in their travels were merely guideposts along their preordained path. Separated by five centuries the connection they shared survived and strengthened. Both women learned and grew from their spiritual bond.

The story of Ma Li & Mary is one of love, loyalty, betrayal and survival at all costs.

Mary Petrovich's mother was a Sioux Indian cryptologist working for the U.S. government in Moscow, and her Russian Secret Police father, were forced to flee to Chicago to escape Soviet and American government agents in the 1980's. They took refuge with her Uncle, a crazed, sadistic gangster. He murdered her parents and repeatedly beat and raped her before she escaped at the age of twelve.

• Local book stores have it as well as **Amazon**, **Barnes and Nobles** and my publisher **AuthorHouse**. Soft cover is priced at \$13.99 and Kindle/Nook version at \$3.99. I will bring some to the next meeting for those who want autographed copies.



In addition to his fantasy/adventure novel *"The Journey of Mary/Ma Li"*. His latest book has 13 short stories under the title of *"Fantasy & Horror Short Stories"*. These 13 stories draw readers into a compelling web of intrigue and





suspense. Some are funny, others sad, and still others capture the inner conflicts that torment us yet hint at hope for a brighter tomorrow. Readers immediately identify with the bigger-than-life fictional characters that make us ponder our inner selves, fantasies, dreams and passions, and question how far we're willing to go to get what we want.

*"Fantasy & Horror Short Stories"* is available at all book retailers and is available in hardcover, softcover and electronic editions. Amazon has it in Kindle and Barnes and Noble has it in Nook versions for \$3.99.

Please visit Joe's web site **www.JAGraffagnino.com** to purchase either book, in any of the listed formats. Also visit his web site for contests, FREE giveaways and information about other soon-to-be-released works from the author.

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# BENEFITS OF MEMBERSHIP IN THE BROOKLYN AQUARIUM SOCIETY

Your Membership Card is your Passport to Becoming an "Educated Aquarist." Don't lose it. Put it in your wallet or purse. You'll need it to attend Monthly Events and get discounts at participating pet stores.

#### YOUR MEMBERSHIP BENEFITS INCLUDE:

Free Admission to all general meetings, held on the 2nd Friday of the month (except July & August) at 7:30 pm at the Education Hall of the New York Aquarium, Coney Island, Surf Avenue at West 8th Street, Brooklyn, N.Y. The Society presents expert speakers on all aspects of the hobby, from freshwater fish to marine aquatic life.

**Breeder Awards Program** 

General meetings are open to the public (a \$5 donation is requested for non-members, good towards membership that evening). Free parts refreshments.

**Special Interest Groups** (SIGs) hold meetings, free at members' homes, for members only. Here's your chance

to network with members with the same interests. Discuss, ask questions, learn, teach and develop your expertise in freshwater and/or marine aquarium keeping.

Aquatica, The Journal of the Brooklyn Aquarium Society, our bi-monthly (5 issues except July & August) award winning publication is on our web site. Each issue is filled with articles on both marine and freshwater aquaria keeping, Articles can be downloaded.

The BAS Bulletin. All members receive our monthly (10 issues except July & August) Newsletter, the BAS Bulletin via email, keeping members up to date on the latest events at the Society, notices of interest and monthly regional society events. All non-commercial members are entitled to a free classified



want ad in each issue, to sell, give away or request fish or dry goods.

#### The BAS is on-line at BASNY.org.

You'll find up-to-date information about our monthly events, links to other aquarium societies in the US and stores, manufacturers and related aquarium sites. We have an on-line library with downloadable articles. We have our own BAS forum, where you can interact with other freshwater, marine or reef members and post free hobby-related classifieds where members sell and trade fish, corals, plants and equipment.

> **BAS Hotline:** For the latest information, call the BAS 24 hour Hotline 718 837-4455 for event and inclement weather information. If you need advice on fish keeping, breeding or where you can find rare or hard to find fish, you can often get help calling the Hotline. Help from the Hotline is always free.

Volunteer: The Brooklyn Aquarium Society is an organization run by volunteers. Without them, there would

be no BAS. Volunteers help set up events, write articles, coordinate projects, assist and work on committees, help at auctions and meetings. Join in, help, learn and have fun doing it. Call **Steven** Matassa, President (718) 238-1792.

**Discounts for Members** at many BAS participating pet stores when you present your current BAS membership card.

Welcome and we hope you take advantage of the many benefits BAS has to offer.

> The Officers & Board of the **Brooklyn Aquarium Society**

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