

The Raleigh Aquarium Society

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March 2023 Newsletter

The Raleigh Aquarium Society (RAS) was founded in 1981 to "encourage and enhance the education, knowledge, and enjoyment of Society members at all levels of experience about the many aspects of the home aquatics hobby". We welcome participants at all levels of experience (including none - we all started that way!). Details can be found at: www.raleighaquariumsociety.org

<u>March Calendar of Events</u>

Thursday March 2nd @ 7:30 PM: RAS Meeting. Chris Smith will host a tour of his Fish Room and Jamye Carr will present a talk on her RAS Kids programs for upcoming events/Expos. Live, In Person, and at the NC Vet School.

Thursday March 9th @ 7:30 PM: Zoom Social Hour (hosted by Caroline Morgan).

Thursday March 16th @ 7:30 PM: Board Meeting (open to all). Contact <u>ras-board@ras.groups.io</u> for info.

Saturday April 15th @ **1:00 PM: RAS Meeting. Speaker and Topic TBA.** Live, In Person, and at the <u>NC Vet School</u>. (Click link for Google Directions)

March 24 to March 26, 2023: RAS CAW 2023 - 3-day (Friday to Sunday) RAS Carolina Aquarium Workshop, XXXVI, Shrimp Contest, and Auction. More information and Speaker bio's online RAS Website here. This is BIG! We have the venue booked with group rate of \$82/night, speakers scheduled, and we need volunteers! More info in newsletter below.

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Letter from the President (Thomas Narten)

March is almost upon us and we've got a busy month ahead of us. Our Carolina Aquarium Workshop takes place the weekend of March 24-26 as described throughout the newsletter. Registration is up on our web site. Couple of things to call attention to. First, we have a big bunch of vendors lined up. They are local and should be well-known to the club (they are listed below). Some will be selling items starting Friday evening and all will be present throughout the day on Saturday. Second, after a three-year hiatus, the collecting trip is proving to be popular! We may be forced to limit participation, so be sure to sign up to ensure your spot in the line. We are also planning on sponsoring additional collecting trips this year, so this shouldn't be the only opportunity to participate.

Our regular monthly meeting will take place on Thursday, March 2 at the Vet School. This month, we have two mini presentations. Chris Smith will talk about the transformation of his fish/plant room, which we know has been producing beautiful plants from what he brings to the monthly auctions. Jamye Carr will speak on the activities she has been doing with kids at events and expos. We'll also have our usual auction. We'll have door prizes as well, and for the March meeting they are tied into Chris' talk and reflect gadgets and thingies he's found particularly useful in his fish room.

March also brings back the NCSU College of Veterinary Medicine (CVM) open house for the first time since Covid. Unfortunately, it falls on Saturday March, 25, the same day as our workshop, making it difficult for us to participate as fully as we might want. Thankfully, Michael Maiele has volunteered to host the table as he has

done many times in the past. The open house provides an opportunity to introduce our club to a large crowd of people interested in animals and critters. And a heartfelt thanks goes out to Michael for being willing to man our booth. It's also the case that one can walk from the Ramada Inn to the Vet School, so hopefully some of us

sneak a visit and support Michael. (See also Michael's more detailed writeup elsewhere in the Newsletter.)

Speaking of the Vet School, now would be a good time to remind each other that we are fortunate to have a supporting partner in the Vet School. Since the beginnings of our club, they have allowed us to use their facilities for our monthly meetings and have been supportive in our mission. We need to remind ourselves not take their

continued support for granted, as the recent "convict cichlid incident" reminds us! As was discussed on our mailing list, a surprise fish appeared in the CVM's freshwater tank around the time of our February meeting. Doing something like this without first getting permission from the tank owner violates so many norms it's hard to describe the outrage and disappointment I (and many others) felt. Luckily, the incident was resolved and attributed to a lapse of judgement rather than ill-intent.

Finally, our 2023 meetings have had strong attendance with large numbers of new "first time" members. Some 55 persons attended the February meeting. Neil's "random question" program worked out well, allowing both long-time members and first-time attendees to chime in and provide their perspective. The overall buzz in the

room was really good and it's nice to see new faces talk about their interests. (It's also a bit scary - in a good way! - when a new face says "I have about 30 big tanks I'm setting up"...)

February Auction Report (Thomas Narten)

The February meeting saw a strong auction. There were a lot of plants, but also some fish, shrimp and snails. Overall, 75 items were brought in. Items came from 12 sellers and went home via 25 buyers. Total revenue for all sales was \$692 with an average selling price of \$9.23 per item. One notable sale: 6 Orange Pumpkin Neocaridina went for \$45!, showing the interest shrimp bring to our club! Out of the total revenue, RAS netted \$265 while sellers took home \$427.

Keep those items coming! Even if you think nobody would want your stuff, I consider it a win to have unwanted or extra items go to fellow club member rather than the compost or as fish food!

Remember also that we have a "freebie" table at monthly meetings, where you can bring unwanted items that you don't need and may not be worth auctioning, but that someone else can use.

BAP Program

There were 4 species submitted for points over the past month, including Apistogramma Tapiche by Lakeshia Mills for her first 15 points in the BAP.

Welcome Lakeshia!

Additional species were:

Neil Frank Amatitlania septemfasciata Matt DeGroodt Inpaichthys kerri Matt DeGroodt Pristella maxillaris - domesticated color type blushing

If you are interested in learning more about the program, please contact the RAS BAP Chairperson: raleighaquariumsociety+BAP@gmail.com

Anyone who would like to join the BAP can contact chairman Matt DeGroodt at meetings or email him at degmat@gmail.com. Full standings and individual scorecards can be reviewed at https://www.raleighaquariumsociety.org/bap

Upcoming Group Buys

There are no planned Group Buys currently, however, please be on the lookout for emails from Sponsors. Sponsors will send an email to our ras@ras.groups.io email. You can sign up online at https://groups.io/

If you are interested in initiating a group buy, follow these steps:

Confirm board approval of your buy and your shipping budget by emailing your plan for the group buy to "rasboard@groups.io"

Announce your proposed buy to the RAS email list "ras@ras.groups.io"

Include coordinator contact information and instructions for the buy

Allow interested members a minimum of 5 days to send their order to the coordinator before the group buy order is placed with the vendor.

Chris Smith says that he's planning a Wet Spot Group Buy order for shortly after the CAW Workshop.

Remember: RAS sponsored group buys means that the RAS pays for the taxes and the shipping costs, allowing all **RAS members (Yes, You!)** to purchase fish, food, and other aquarium supplies at reduced cost. <u>Group Buys</u> provide access to unusual or hard-to-find fish, plants and foods that generally are not available at local fish

stores (LFS). Group Buys are open to all current RAS members, and are organized by individual RAS members, **(Yes, You!)** with the approval of the RAS board. Each group buy has a "sponsor", and participants work directly with the sponsor to work out details of a specific purchase. RAS is open to proposals for additional group buys from all members. <u>Details here</u>.

Thank you to all our Group Buy Sponsors!

RAS CAW Workshop on March 24th through March 26th

RAS CAW 2023 - 3-day (Friday to Sunday) RAS Carolina Aquarium Workshop, XXXVI, at the Raleigh Ramada Inn by Wyndham.



Carolina Aquarium Workshop XXXVI March 24-26, 2023 -- Raleigh, NC www.raleighaquariumsociety.org





Friday: Collecting Trip!

Fri/Sat: 8 Talks, Shrimp Contest

Fri/Sat: Vendor room!

Sunday: Big Auction!

8 Talks!

Gary Lange – Rainbowfish Expert Robert Lupton – Shrimp/Flip Aquatics Joshua Wiegert – Batfish Aquatics Ryan Chan – Amano Shrimp



Shrimp Bowl Contest

Judging by Robert Lupton!



You can download a copy of the flyer online from <u>here</u>. If you can print it out and take it to your LFS, that would be appreciated. Even if you're in another state, even if you're not able to attend. We need to get the word out.

Please consider volunteering! It takes a village. The more volunteers, the less there is to do. Please contact the RAS Board.

The Raleigh Ramada Inn by Wyndham is located at 1520 Blue Ridge Road, Raleigh, North Carolina 27607; (919) 832-4100 or (844) 204-9930; www.ramadaraleigh.com. A special room rate of \$82/night is available through Friday March 10. Use the Group Code "RAS2023"

Planned events include:

- Native fish & plant collecting field trip at local waterways
- Meet and Greet
- Late Night Trivia
- Shrimp Bowl Competition

- Vendor Room and Sales
- Banquet
- Social times
- Auction on Sunday Open to the Public with \$5.00 admission fee for non-RAS Members

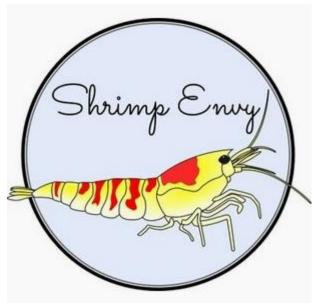
RAS would like to thank the following Donors/Sponsors.



https://www.hygger-online.com/ <u>Amazon Store</u>



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https://www.aquariumcoop.com/



https://caribsea.com/ On Amazon



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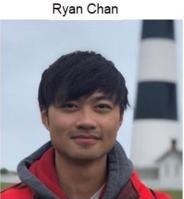
https://myrtlebeachdiscus.com/

Speakers and Topics

EDITOR CORRECTION

Image from the February RAS Newsletter mis-identified Robert Lupton and Josh Wiegert, my sincere apologies for any confusion. The image below is the corrected version.









Robert Lupton - Keeping Freshwater Shrimp: Top 10 Reasons Shrimp Keepers Fail.

Rob shares his 10 years of experience with importing and breeding 100,000's of shrimp. Anything from Taiwan bee shrimp to cherry shrimp, these 10 reasons apply to them all. He covers Water Parameters, The Source of Shrimp, Shipping, Bacterial Infections, Feeding and Temperature. Find out what the top 10 reasons are for shrimp deaths in aquariums and how to fix them.

Ryan Chan - Unlocking the Key to Spawning Cardinal and Neon Tetras

Ryan will walk through the process of spawning these iconic aquarium pets, including water parameters, spawning setup, and the tricks he has discovered through the journey.

Josh Wiegert - Nano Tank Adventures: Setting Up A Small Tank.

How Small Can You Go!? While there are those aquarists trying to figure out whether their floor can handle 10,000 pounds or not, tiny tanks are all the rage these days. Aquariums ranging from 20-gallons down to tiny tanks that don't even hold a gallon of water are increasing in popularity, fueled in no small part by drives away from bigger homes to apartments and minimalistic attitudes. They pose many unique challenges, and this talk looks at several tiny tank set-ups, suitable fish, and their care.

Gary Lange - The Most Amazing Rainbowfish

In our pursuit of this amazing rainbowfish we used planes, a Ferry Boat (yes a ferry boat), Cars, Taxis, Motorcycles and a giant Dump Truck! Whatever it took to complete our mission! Oh and then there was that 18 foot boat with twin 40 HP motors to head alongside the shoreline fighting 4 foot ocean waves. Our 7th trip

to West Papua was indeed lucky as we brought back four species that will almost for sure see commercial production. Two of them are perfect for that midsized planted aquarium. Move over praecox and boesemani!

Ryan Chan - Secrets of Breeding the Amano Shrimp

Ryan is the founder of Avatar Aquatics on YouTube and has been keeping fish for more than a decade. In this presentation, he will do a complete walkthrough of his 2.5 year project and speak on the secrets of salinity, food, and life cycle of this popular algae eater.

Robert Lupton - Q&A on Breeding and Maintaining Shrimp

The golden opportunity for participants to ask any question about shrimp and nano fish from the expert owner of Flip Aquatics.

Josh Wiegert - So, You Think You Want A Giant Tank

Every aquarist has, at one time or another, dreamt of it -- a big tank. No, not a 180, not a 240, something gargantuan, something that would make the neighbors (and maybe your spouse) question your sanity. But, what's it really like to get a Big Tank -- what are the ins and outs of planning it, and some of the realities of owning one? Is this something that many aquarists can reach for, or is it better left in daydreams?

Gary Lange - It's Not a Problem it's an Adventure! The Blood Sweat & Cheers of 7 Trips Chasing Rainbowfish in New Guinea

Since 2005 I have been fortunate enough to make seven trips to West Papua. We have brought back species that haven't been in the hobby as well as some fifteen brand new species of rainbowfish! This talk is about how I went from being just a keeper of rainbowfish into someone who searches all over Papua for new and exciting species. It's not just about the fish we find, actual fishing time is perhaps five percent of the time we spend on our trips. It's about the places we go and the people we meet once we get there. It's about a lot of the other things we see besides the wonderful rainbowfishes. The "One Thing" that we always encounter are "problems". Problems that you wouldn't encounter perhaps in North America or a problem easily solved here that can be insurmountable in the tropics. So many problems sometimes that instead of going with "plan A" we often find ourselves going with plan C or D. So much so that our motto has become; "It's not a problem it's an adventure". So come along and join us as we show you the ups and downs of collecting fish in Papua. And yes there will be plenty of fish pictures.

Schedule of Events

Friday, March 24

12-6 pm	Native fish & plant collecting field trip at local waterways (Led by Gerald Pottern)
6:30 pm	Meet and Greet (with hors d'oeuvres)
7:30 pm	Robert Lupton - Keeping Freshwater Shrimp: Top 10 Reasons Shrimp Keepers Fail
8:30 pm	Ryan Chan - Unlocking the Key to Spawning Cardinal and Neon Tetras
9:30 pm	Mini-Auction / Late Night Trivia / Social Hour

Saturday, March 25

8:30 am	Registration and Gathering			
8:30 am	Shrimp Bowl Competition - Setup and Sign in			
9:30 am	Josh Wiegert - Nano Tank Adventures: Setting Up A Small Tank.			
10:45 am	Gary Lange - The Most Amazing Rainbowfish, followed by auction of rainbowfish eggs			
Noon	Lunch (60 min) + Shrimp Judging			
1:00 pm	Ryan Chan - Secrets of Breeding the Amano Shrimp			
2:15 pm	Visit Vender Room/ Shrimp Bowl Competition Judging			
2:45 pm	Robert Lupton - Q&A on Breeding and Maintaining Shrimp			
4:00 pm	Visit Vender Room			
_	People's Choice voting for Shrimp Bowl ends			
4:30 pm	Josh Wiegert - So, You Think You Want A Giant Tank			
5:45 pm	Final Visit to Vender Room			
5:45 pm	Banquet and social hour setup			

6:15 pm Social Time & Shrimp Contest Viewing

7:00 pm Banquet and presentation of shrimp contest awards

8:00 pm Gary Lange - Collecting Rainbowfish: "It's not a Problem, It's an Adventure" followed by short

auction of remaining rainbowfish eggs

Sunday, March 26

9:00 am Auction Registration and Setup

10:00 am Auction Starts

Native Fish & Plant Collecting with Gerald Pottern

12:00 pm to 6:00 pm: Native fish collecting trip at 3 or 4 local streams or lakes within a 1 hour drive of Raleigh. Meet at Ramada Inn front door and we will sign participant waivers and carpool from there. Gerald will have a scientific & educational permit to cover our group, so you won't need a personal NC-WRC fishing license during this trip. RAS will have a few dipnets, seines, buckets, and a photo tank, but bring your own if you have them. Also bring waders or tall rubber boots, food, drinks, towels, and dry clothes. If you plan to keep any fish, bring a bucket or cooler, salt, air pump, and sponge filter, box filter, or air stone. To sign up, contact Gerald at gbpottern@gmail.com. Limited to 20 participants.

Locations will depend on weather and recent rainfall. If no recent heavy rain, we can do either Piedmont (north and west of Raleigh) or Coastal Plain (south and east of Raleigh). If streams are running high, then we can only do Coastal Plain. If you are driving in from out of town Friday morning, and our first collecting site is on your way, you can meet us there to save time and avoid back-tracking.

Collectors will need to provide their own care for whatever fish they want to keep.



Shrimp Bowl Competition with Richard Mullinax

The shrimp bowl contest is a short month away. I am excited for how much I will learn from our guest judge Robert Lupton of Flip Aquatics, https://flipaquatics.com/. The club will also host Therese Neal, the organizer of the National Shrimp Contest at the Aquatic Expo coming up quickly in June, https://www.theaquaticexpo.com/. After incredible notes back and forth, I am excited to meet her in person and 'drip acclimate' in her vast shrimp expertise. Thank you both so much for offering to participate in the 2023 CAW Shrimp Bowl Contest. Robert is bringing a fist full of gift cards to be used as door prizes and Therese has offered a place for the overall winner of our contest into the national contest.

To date there are spaces for a dozen more entries of shrimp in our contest. Please consider entering your home bred shrimp now if you have not yet. On march 10th any remaining places will be offered to those on the waitlist to have additional entries. So far there are few entries in the species category. Looking for tangerine tigers, sulawesi types, and halocaridina, each of which are bred within our club. Also the crystal red, black, and burgundy are under represented if you have been on the fence about showing the club what you have been able to breed.

Consider that most everyone coming to the workshop will see varieties of shrimp they have never seen in person before. Mare variety being shown is a benefit to all.

The awards were pre printed for the last contest. If anyone has mad design skills, or just a couple hours to volunteer to help the shrimp contest, and would like to offer to create the awards this year, please connect with me. Along with awards of first, second, and third places in each category, there will be \$25 Flip Aquatics gift card prizes for each of the first place winners. If anyone has a suggestion for the People's Choice winner prize please share it with me. The one thought I had was a cash prize in the amount of the number of votes cast for them.

No entry fee above the CAW registration, \$25 gift cards for 5 winners, evaluation of your breeding program by national treasure Robert Lupton, CAW 2023 is loaded with perks for shrimp breeders. It's my hope that in your excitement, like me, you are asking folks if they are coming, and more so if they are showing their shrimp.

Raleigh Aquarium Society Carolina Aquarium Workshop 2023 Shrimp Bowl Contest March 25

Enter now!



Gift card prizes for first place in each category

Hanging out until the big day, then it's showtime.

Vendors

Vendors may offer Pre-Order Items. Please support them because they support us!



Saburai Aquatics https://saburaiaquatics.com/



JD Aquatics https://jdaquatics.com/



Sum Fins Fishy https://www.sumfinsfishy.com/



I Wet My Plants https://iwetmyplantsaquatics.com/



Carolina Axolotls
https://www.facebook.com/CarolinaAxolotls/



Dubey's Pet World https://www.dubeyspets.com/



NC Bettas and Fish https://www.facebook.com/NCBettasFish



Oak City Aquatics
https://www.oakcityaquaticsvet.com/



Diana Walstad https://dianawalstad.com/

Sunday Auction

Sunday March 26, 2023. Free for RAS Members, and only \$5.00 for non-members. Note that this fee will be waived for all aquarium club members that can provide proof of membership. Sellers must pre-register items online with MyGroupAuctions.com Please create a login and join our group: RAS. Enter items, preferably with pictures under the RAS Carolina Aquarium Workshop auction. If not done in advance or if you have additional last-minute items to register, PLEASE COME EARLY to register on-site. Help will be provided. See the RAS Auction site for more information.

(Article) NCSU CVM OpenHouse is back for 2023! by Michael Maieli

On Saturday, March 25 2023 from 9am until 3pm, the North Carolina State University College of Veterinary Medicine (NCSU CVM) will host its annual OpenHouse on the campus of the school located at 1060 William Moore Drive in Raleigh, NC. This popular springtime event has been occurring for almost 2 decades, rain or shine, although the last 3 years were cancelled due to the Covid pandemic. Most facilities are open to the public and will include tours and demonstrations of the of the important research and education work performed there. Classrooms, laboratories, auditoriums, libraries, etc. will be easily accessible and over 10,000 people are expected, half of them

children. In the past, outside activities have included K-9 demonstrations from the Raleigh Police department, hands-on cow milking, sheep shearing, and pony rides. Food trucks will also be available.

A variety of animal-related clubs and societies from the local community round out the experience and the Raleigh Aquarium Society (RAS) joins that list. RAS has been participating since 2013 and is the only aquatic organization represented. Our booth is located in the main lobby, upstairs from the library, next to the large marine display tank, and we plan to have various activities and give-aways. If anyone wants to volunteer, especially our younger members, please inform the board. Full day participation is not required. Hope to see you there!

(Article) Plants for a Non-CO2 Tank by Diana Walstad

Finding plants that will grow well without CO2 injection is essential to having a low-maintenance tank. Only healthy, growing plants can purify the water, protect fish, and control algae. The Table lists plants that have done well for me over the years/decades. It shows a mixture of rooted plants, floating plants, and epiphytes. Vallisneria spiralis and Sagittaria are unstoppable in my tanks. The Cryptocorynes take longer to gain ground, but once established they flourish.

Beginners with their first planted tank may encounter frustrating melt-downs of purchased plants. This is a common problem, because most commercial vendors sell plants in their emergent form. The necessary conversion from the emergent to the submerged form for some species can be brutal (shedding of all emergent leaves). The transition for other species (e.g., Hygrophila difformis) is much faster and smoother.



Non-CO₂ Tank with Easy Plants and Rainbowfish

Tank was setup 6 mos. earlier. Most plants are long-term easy growers. The red stem plant *Rotala macrandra* in the center gradually died out. Possibly, it needed supplemental CO₂, iron fertilization, or couldn't compete with the other plants.

Table. My Easy Plants

Plants	Common Name	Plant Type, etc
Anubias barteri var. nana	Anubias	Epiphyte
Bacopa caroliniana		SP
Bacopa monnieri		SP, brackish water
Bolbitis heudelotii	Bolbitis fern	Epiphyte fern
Ceratophyllum demersum	Hornwort	Rootless
Ceratopteris thalictroides	Water Sprite	FP, fern-like
Cryptocoryne balansae		RP, med.
Cryptocoryne blassii		RP, large
Cryptocoryne wendtii		RP, med.
Echinodorus 'Ozelot'	Red Flame	RP, large, red-mottled
Echinodorus bleheri	Amazon Sword	RP, large
Echinodorus compacta		RP, med.
Echinodorus major		RP, large
Hemianthus	Pearl grass	SP, small
micranthemoides		
Hygrophila difformis		SP
Lemna minor	Duckweed	FP
Limnobium laevigatum	Frogbit	FP, tropical
Limnobium spongia	Frogbit	FP, spongy leaves
Ludwigia arcuata X L.	Ludwigia hybrid	SP, reddish leaves
Migragorum ntaranua	Iovo Form	Eninhyta fam
Microsorum pteropus	Java Fern	Epiphyte fern
Monosolenium tenerum	Subwassertang	Fern gametophyte
Najas guadalupensis	Guppy grass	SP, needle-like leaves
Nymphaea lotus	Red Tiger Lotus	RP, med.
Pistia stratiotes	Water lettuce	FP, fuzzy leaves
Riccia fluitans	Cyrstalwort	Floating moss
Rotala rotundifolia		SP, small-leafed
Sagittaria graminae		RP, med., grass-type
Sagittaria subulata		RP, small, grass-type
Salvinia cucullata		FP, med.
Utricularia gibba	Bladderwort	FP, tiny, carnivorous
Vallisneria spiralis	Corkscrew Val	RP, med., grass-type
Vesicularia dubyana	Java Moss	Epiphyte moss

Explanations: Epiphytes (e.g., Anubias) attach to solids with rhizomes; FP =

floating plant; RP = rosette plant; and SP = stem plant

Be cautioned that many commercial vendors offer popular species [e.g., Bucephalandra, HC (Hemianthus callitrichoides), etc] that do not fare well in Low-tech tanks. Plants with unnaturally vibrant red colors are another giveaway for high maintenance. These species cater to aquascapers, plant collectors and High-tech tanks. The optimal growing conditions of high-tech procedures allow less competitive species to flourish.

High-tech hobbyists typically maintain CO2 levels between 13 to 30 ppm. In contrast, the natural CO2 in my tanks—provided by decomposition, air diffusion, and fish respiration—fluctuates wildly during the day between <1 and >10 mg/l. Most likely, there are other factors that contribute to the common observation that the species composition of Low-tech and High-tech tanks often differs.

The species composition in a planted tank can change over time. For example, I obtained luxuriant growth of Rotala macrandra and Hygrophila polysperma the first 6-8 months after setup. (This is the time when a soil underlayer releases considerable nutrients and CO2.) Afterwards, these supposedly "easy" plants declined. In contrast, stem plants Bacopa, Rotala rotundifolia, and the Ludwigia hybrid have done well without coddling for years.

Beginners should start out with as many candidate species as possible and find the ones that work best under their conditions. Here is where I would focus my time, money, and energy. Let the plants sort it out.

Where to find plants? At aquarium club meetings, hobbyists frequently sell or even give away plants, often in their submerged forms. And the RAS auction on Sunday March 26, 2023 most likely will have a huge variety of aquarium plant species.

Material for this article was taken from the new 4th Ed. of 'Ecology of the Planted Aquarium' (2023) by Diana Walstad. Books will be available at the RAS 2023 Workshop (March 25-26).

(Article) Raising Red-Cherries by John Adams

A perspective from a beginner shrimp keeper.

Lucky to have a 2 month old 5 gallon tank ready for my shrimp adventure. A visit with Diana Walstad (again, lucky me) acquires ten Red Cherry shrimp.

They quickly disappear in the planted 5 gallon tank and for weeks I think I have killed most of them. Another



The Shrimp are not thrilled with algae wafers or shrimp king pellets. Bits of blanched

vegetables are not making them happy either.

Oh no, a dead shrimp - a quick post to the Facebook page and I am reassured - it is only a

molt. Carefully I do count about 20 shrimp - they are still alive after about 3 months.

After about 3.5 months, it seems like they are starting to settle in. I read and learn. Shrimp wizzing around the tank means they are hungry. Let some algae grow on the glass, and substrate- they love to eat it.

Then, during a visit with <u>Brandon Campo</u>, he recommended the Logemann Bros. GlasGarten



SHRIMP FOOD!!





It seemed like a good recommendation so Amazon to the rescue. YouTube videos say baby shrimp don't move around looking for food. So the GlasGarten shrimp baby feeds the baby shrimp. It is a powder that I mix with water in a small bottle with a squirt nozzle. About every three days I squirt the mix all over the tank so baby shrimp food floats everywhere. The shrimp dinner is small pellets - about 1 pellet for 20 shrimp. The shrimp eat the pellets like no other food I have seen. The mineral junkie is said to provide essential minerals. I drop a small piece in every other day. The shrimp love it!

I have a few snails but the population does not really grown until I start feeding with the GlasGarten shrimp dinner. I found the connection between snail population growth and feeding. If I overfeed the snail population grows - a lot!

I also experimented with remineralized RODI Water. The powder is added to RODI water to get the exact KH and GH the shrimp may require. Our kitten, Piper is always very helpful.

Overall I found no great advantage to remineralized RODI water with my Red Cherries.

My well water and the organic substrate provide the minerals in the water the shrimp love. The addition of the mineral junkie adds additional nutrients.

A ph of around 6.5 - 7.0 is averaged in the tank. I do watch TDS and try to keep the TDS at an average of about 200. I do think it's important to keep minerals in the water

Also I really learn that water quality consistency in the tank is very important.

Now, about 4 months into my shrimp adventure. BABIES. It was so exciting. The shrimp loved the new food. The snail population grew more rapidly. No heater, we keep our house inthe mid 70's. I had a small but good HOB filter. The water was kept clean, substrate vacuumed and 25% water was changed about every two weeks.









Shrimp were happy and the babies were now everywhere.

At 6 months the tank was doing great. Growing shrimp, no algae, and the plants were happy. Several times I pulled plants out. The water would get cloudy from the organic substrate, PANIC, but the filter would soon clear the tank. Probably when the 5-gallon tank had about 40 shrimp and babies it seemed to reach a balance.

When the tank was about 8 months old it was time for a change.

This time, an established 10 gallon planted tank was ready.

They loved it. Just the beginning.

I hope you enjoyed the article. I learned so much from incredibly helpful RAS members and the internet. Thanks to all!



If you run across interesting articles and/or video's, please send a pointer to the article to newsletter@ras.groups.io

Aquatic Video's

Raleigh Aquarium Fish Auction | UNC-TV by NC Now

Going Native With the Raleigh Aquarium Society by All Natural Aquatics

Raleigh Aquarium Society- August 2019 by All Natural Aquatics

FULL Fish Room TOUR of Master Breeder NEIL FRANK - Raleigh Aquarium Society by

Avatar Aquatics

Fish Club Auction: How to Bid Like a Boss by Girl Talks Fish

Join a fish club!- Tuesday tip by Rachel O'Leary

More Info About RAS

Shop RAS merchandise online at https://raleighaquariumsociety.qbstores.com/.

Raleigh Aquarium Society Code of Conduct - We expect persons participating in any and all RAS activities

to act maturely, to behave professionally, to respect the rights and dignity of others, and to treat everyone equally and without discrimination on the grounds of age, gender, disability, race, ethnic origin, nationality, color, parental or marital status, religious belief, class or social background, sexual orientation or political belief. Anyone experiencing or witnessing a potential violation of the Code of Conduct should contact any RAS board member or reach the board at ras-board@groups.io.

More information can be found online here: https://www.raleighaquariumsociety.org/code-of-conduct

Information about **RAS**, its Facebook and email list links, membership purchase, current board members, etc. can be found on our web site: www.raleighaquariumsociety.org