



GRAND VALLEY AQUARIUM CLUB TANK NOTES

SEPTEMBER 2017

SPECIAL EDITION ISSUE

In Memory of Steve Hosteter

In May 2017, GVAC unexpectedly lost a dedicated member of the club, Steve Hosteter. Steve has worn many shoes in the club, including chairperson of the Horticultural Award Program since 2012 and served on the board of directors as Sergeant at Arms since 2016. Many in the club would also recognize him from the front tables at our annual spring and fall auctions, as he organized and prepared items and auction slips for each item to go through our auctions and assisted with priority items. I know he also helped out his wife, Deb, with the beginning of her role as treasurer in GVAC as they together worked hard to send auction checks swiftly to sellers after our spring auction!

Steve always had an enthusiastic and welcoming personality along with a great sense of humor that brought some fun memories to GVAC meetings and events (I recall some funny stories told to me after GVAC board meetings and at the front table of this year's swap meet!). His passion for the fish hobby was well known along with his enjoyment of reptiles, and he always had the whole family in on the fun!

Deb Hosteter, Steve's wife and current GVAC Treasurer, would like to thank GVAC members who donated to their family to remember Steve. She and their daughters, Krystal and Lily, plan to keep Steve's aquariums up and running to remember him as well as continue to participate in GVAC. I'd also like to give a shout out to Chris Carpenter for going to Deb's home to help with Steve's saltwater tank and to the various other members who have helped out Deb, Krystal and Lily.

This newsletter is a celebration of Steve and his time as a GVAC member, chairperson, board member and hobbyist. I have collected Steve's published articles and photos to share as one in this special Tank Notes issue. Along with his articles, various club members shared their thoughts, memories of their time with him and photos of Steve participating in GVAC events. Steve will be missed by many.

Shealyn Sarns, Tank Notes Editor

MEET THE AQUARIST – STEVE HOSTETER

I have been involved in aquariums since I was a child, getting my first aquarium at nine years old. That first tank was a disaster waiting to happen: a small metaframe tank with a box filter. I fell into the inch per gallon craze and tried to keep a goldfish, a hatchet fish and a common pleco all in a five gallon. In my defense, they added up to five inches after all. Well the first loss was the hatchet, then the pleco, but that poor goldfish held on for over a year. But even with the tragedy I was forever hooked.

I started going to the library and getting all the books I could find on keeping fish. Then, I started reading magazines, well, at that time the magazine TFH. I learned that size mattered and saved my chore money to buy a super large ten gallon all glass tank. I thought it couldn't get better. It had crystal clear glass and a twin bulb lighted hood in rich brown plastic wood grain. I saved for a while longer to get a clear plastic air powered HOB filter. It was great, I had all that room now! That tank stayed with me through high school after losing more fish to poor stocking and worse maintenance. I found that guppies were the best fish ever. I was able to get spawn after spawn and was able to trade them for food.

Throughout this time, I upgraded to an electric HOB aquaclear mini (which by the way are the best filters ever in my opinion, I still have the one I bought in 1989 and it still runs). In high school things really took off, I was a teacher's assistant for the biology department and took care of the 125 gallon saltwater tank and the 180 gallon freshwater tank. My little 10 gallon seemed really small and the Oscars I cared for at school were intrancing. But a large tank was not feasible in my home. So I carried on keeping Livebearers in my little ten gallon.

In 1996, my family moved to a large home in Jamestown and the best thing was I had a basement bedroom. I bought a 55 right away and set it up with a reverse flow undergravel filter and a penguin 350. Oscars were now in my bedroom and still having that little ten gallon, I had all the live

food I wanted. Soon after I married my high school sweetheart and I moved again, I brought the 55 with me but the little ten didn't survive the move. Now I had a home of my own and my head ran away with all the ideas for where I could put more fish tanks. Soon I had several 20 longs and a couple of small betta bowls. I tried to spawn several different fishes at great loss and once my oldest child was born, I had to put aside my fish. Although I kept my 55 gallon, I traded off my Oscars for more community fish. In 2001, I started to get the bug back and slowly built up a modest collection of tanks. First was another large tank for an Oscar, then came several 29 gallons for angel fish and common Livebearers. With things going well, I began to read more and more about saltwater tanks and took the plunge into saltwater. Well needless to say, I drowned but I did learn that clown fish are bulletproof.

Then one fateful winter day I drove past this odd house in Jenison with a orange sign on the roof I found Bluefish. My eyes popped out as I looked at all the wonderful planted tanks and I drooled at the selection of fish I had only saw in magazines. The patient guidance by the people there exploded my collection of fish and my success in breeding. They also guided me to this club that I enjoy so much.

Today my fishroom is shared with my wife's reptiles, I have more tanks than my family thinks is even sane, they feel thirty is a bit much. They don't all house fish though, as I said, my wife keeps reptiles so we have three holding ball pythons and one holding a Pac man frog. We also raise our own live foods so some are cultures and we have a rodent colony as well, herps gotta eat.

This was a very short outline of the past 31 years of fish keeping and I past over many failed projects and many successful ones as well. No mistake is a failure as long as you learn from it and that has kept me going. Looking back I chuckle at what passed as high tech over the years and I know what I do today will seam primitive tomorrow. As to my saltwater mishap, well I learned from it and I am sure I have driven a few mad with the constant questions about current saltwater aquarium keeping. But soon I will have a new saltwater tank in my home and this time things will go much better.





NAJAS GUADALUPENSIS; A BLESSING & A PLAGUE IN THE SAME PLANT

Najas grass or also called guppy grass is a livebearer staple. It can provide shelter and food for fry, it can provide cover for shy adults and it even helps in tank filtration. It can often be found stuffed in bags at GVAC auctions for a fair price. It grows well in almost any tank condition without any special lighting or substrate. A fast growing, loose branching stem like plant it grows floating in the water where it sends out anchoring roots into the substrate.

That is where the plague side of it comes in, it has over run my planted display tanks! Not that it is a bad plant by any means it simply does too well in my tanks. I can cut back my 55 gallon every two to three weeks! Also once it is established in the substrate it seems almost impossible to completely remove. All it takes is a little fragment to start all over again. This is the case in my 30 gallon planted tank, nothing beats pulling Najas out of my Madagascar lace plant. For my breeding, bare bottom tanks, this is not an issue just rinse out the tank completely and all gone.

Do not take me wrong I do love the stuff I use it in all my breeding tanks as fry cover mostly due to my laid back approach to breeding. If the fry do not make it on their own in a breeding colony I move on to a new fish. I have found that many species can be done in this manner from Killies to Cichlids and of course livebearers. Shrimp also do well in a tank full of Najas. The only way I have seemed to kill it is when I tried it in a my summer deck tub. With the heat we had last summer it didn't survive, I personally think it is not so much the light, but the high temps. The Najas in my tanks seemed to have slowed down as I struggled to keep tank temps below 84.

Alas, I do know, without much doubt, that as the temps cooled it came back in full swing in the fall just in time to bring it to the fall auction so that I could share my blessing and my plague with fellow fish breeders. So if you need a great easy plant to HAP or cover for fry, Najas is your plant. If you wish to use it in some neat aquascaping venture keep those snips sharp and get every fragment out of the water as you cut it back or you will share in my plague.

SEXUAL PROPAGATION OF APONOGETON CRISPUS

During a discussion with plant guru Ben V. I asked him what would be the easiest plant to get to flower in the aquarium. His response was fast and simple *A. crispus*. He told me it was a three turn in plant easy to flower and easy to get seeds.

The set up was simple, a well-lit tank with a rich substrate and time. My set was as follows A 30 long lit by 2 T-5 HO bulbs, I use seachem fluorite substrate and added a fertilization block near the base of the plant. The lights are on a 12 hour cycle and the tank is near a north facing window. Water changes are every other week 30 percent and liquid excel weekly. The plant settled in quickly and grew fast. I had my first flower in just a few weeks. Needless to say I was very excited, I had a plant flowering inside! Well time went on and flowering maybe it was the natural cycle of the plant or a change in ambient light and temp I do not know. By May it started to flower again and I thought this was time to try and get seedlings off the plant. I gently used a paint brush to pollenate the flowers hoping that by sheer luck I may get seedlings time passed and I noticed new plants floating around the tank along with a mass of *Salvinia*. I moved the seedlings down to the substrate to let them mature more and the leaves to grow enough to confirm that they were indeed *Aponogeton crispus*! After a month there was no doubt that I had seedling *A. crispus*.

This is not a clinical diagram of how to flower and sexually propagate plants. It is simply a man taking advice from an experienced horticulturist and some plain ole dumb luck. I hope this will excite others into getting their hands wet trying to produce plants via flower. Oh and by the way if you want to get three points off a single plant I would highly recommend *Aponogeton crispus*.



ADVENTURES IN MINI REEF CYCLING

Around the turn of the last millennium I thought I would take the plunge into saltwater aquariums. I purchased a twenty long and several T8 light strips then I added a skilter filter and a powerhead. Bang I was all set up or so I thought, I added twenty pounds of crushed coral and purchased the same amount of live rock. At that time I thought my tank was ready to stock so I stuck hundreds of dollars in crabs, fish, corals and anemones all in a two week period. Many of you reading this are already knowing where this went. Within a week I lost all my corals and most of the inverts, green algae covered all the rocks and most of the sand. Apistia anemones filled in where the algae didn't so I thought let's do a huge water change and solve this. I got out the trash can poured in the salt mix and filled the supposed amount of tap water. I stirred until it looked right and tested the salinity voila I crashed the tank! After a few weeks and a empty bank account, I gave away the sole survivor a clown fish and trashed the rest of the substrate and rock. I pledged I would never again try saltwater ever again or so I thought.

Over the past few years I have been drawn into the allure of saltwater. I slowly began to collect dry rock and chat the ears off anyone I knew that was into saltwater reef tanks. I was well pleased with the jump in technology for saltwater aquariums and the cost of much of the equipment had come down. But the most important component was the availability of pre mixed saltwater. So in February after a trip to Florida I ordered a fresh new tank a 35 gallon cube. I set it up with 40 lbs of live sand and 30 lbs of dry base rock. After a week of tuning the heat and water flow I added 10 lbs of premium live rock and a Peppermint shrimp. One thing I had learned was unlike freshwater aquariums, saltwater aquarium conditions are delicate and small water changes are safer than large and so started the weekly 4 gallon water changes. Over the next few months I watched the water parameters and slowly added more invertebrates and fish. I have gone through a round of diatom blooms and than bubble algae. Briopsis algae brought in my first unexpected challenge.

With its upset I began to search for a solution and after many conversations I started treating or dousing the tank with a large amount of magnesium. It slowly began to clear out the outbreak and also seemed to encourage coralline algae. Now over four months into this project and fairly confident I would do well I started to add corals. The tank was now looking like a reef. Then well Murphy's law kicked in.

A new bane had taken residence, Cyanobacteria. This was not as much of a surprise but a slack in maintenance.

Phosphate was the main culprit so I cut back feeding and started twice weekly water changes to remove the cyanobacteria. It helped but I wasn't getting ahead. After some more reading and talking with others I cut back my light output and added phosban pads to the filter. Now it was really cleaning it out and looking good so here six months into the reef I thought the cycle was done.

Well it wasn't, hair algae began to pop up. I had added an emerald crab and it was feeding on it but not as fast as I would like so I added another. It helped but I knew it was not a long term solution. I had seen several tanks with macro algae in it to out compete for excess nutrients so a message to a fellow club member and I had some to add. At the same time I saw the same member adding Livebearers to his salt tank and found out they eat algae as well.

As of the time I am writing this I now have had a single Mollie in my tank for a few days and all I can say is WOW what an algae eating machine. I know that this is not an ideal method of reef cycling or management but it is working for me. I have not lost any livestock and everyday I see positive changes in the overall health of the tank. I also have learned that cycling a saltwater tank is a slow long-term process. I believe a lot of this has to do with the dynamic relationships between all the organisms in the tank from bacteria all the way up the chain to the fish. This balance doesn't due well with rapid changes that we often do in a fresh water set-up. Things change slowly because of this. That being said I think it adds to the appeal and mystic of a reef tank.

In conclusion and for a simple fyi as it stands this is my current setup a 35g deep blue cube. I am running a 250gph hang on the back skilter filter, a single korilla nano, a 150watt submersible heater and a black box led light set at its lowest white output and about 25% of the blue. Livestock is six Nassarius snails. One trouchus snail and three turbo snails. Three emerald crabs, a pistol shrimp and a peppermint shrimp. Two clowns, shrimp gobie and a sailfin mollie. A colony of star polyps, a toad stool leather, a Kenyan tree and some trumpets. And of course some macro algae.



CHEAP CO2 INJECTION FOR THE DIY HOBBYIST

After keeping live plants in my aquariums for many years I decided it was time to up the game. I started years ago with low light plants such as Anubias and java moss. This kept my interest for years allowing extra filtration and a place for fry to hide all with no change to my tank setups. Two years ago I stepped it up a notch and set up a tank (30l) with growing plants being the main focus of the tank. I splurged on a T5 HO light and plant substrate. This tank greatly widened my ability to keep a large variety of plants but also lead me to the title of this article. If you would like to give co2 injection a try in your planted tank here is a list of the parts I used in this project:

- 1 empty 2l soda bottle
- 3' of airline
- 1" round air stone
- Tape or silicone to seal the airline to the lid

The recipe for CO2 was 2 cups sugar dissolved in 1.25l of hot water, when cooled to room temp I added 1 tsp. active dry yeast and 1 tsp. baking soda.

Finding many failures keeping fine leaved stem plants I began to look into CO2 injection. The possibilities are endless and there are a great number of premade kits available but, my

budget for this was next to nothing so with a little online search I came across the 2 liter method. My thought was why not try it. It fit my budget of next to nothing plus the my sister in law is a baker so I can get yeast and sugar for free! So I bought a bottle of soda and let the kids get a buzz so I could use the empty, grabbed some old airline and air stone and some tape and had at it. First I drilled a small hole in the lid so the air line was difficult to pull through (had to use a small needle nose pliers to get it through) and pulled an inch of line from the outside in. Next I filled the bottle 2/3 full of hot tap water and added 2 cups of sugar shook the bottle until it dissolved and let it set on the counter until it was at room temp. Then I added a tsp. of active dry yeast and a tsp. of baking soda to the bottle screwed the top on tight and wrapped it with tape for good measure. I sat the bottle behind my tank and placed an old air stone on the end and dropped it in the water behind some stem plants. After one week I noticed a big difference in my plants even those fine leaved stem plants were doing much better. But, the bottle fizzed out after 7 days and the bubbles were huge so I tried to move the air stone and found a problem, the old air stone fell apart in my hands. So a trip to the lfs and a new air stone along with a fresh mix in the 2l bottle and wow the bubbles were a lot smaller with a 1" ball air stone and the second bottle kept a consistent flow for two weeks! All in all this method has worked very well for me and the cost couldn't be cheaper. To me DIY is part of the hobby I am always looking for ways to make or adapt items to make life more interesting in the fishroom.





STEVE HOSTETER BAP HISTORY

Planorbis corneus/rubrum (Ramshorn Snail)

Procambarus sp marmorkrebs

(Self cloning crayfish)

Xiphophorus helleri

Limia perugiae

Neocaridina denticulate

“cherry shrimp” (Red Cherry Shrimp)

Tanichthys albonubes (White Clouds)

Pelvicachromis pulcher (Kribensis)

Amatillania nigrofasciatus (Convict)

Hemichromis bimaculatus (Jewel Cichlid)

Poecilia wengei (Endler’s Livebearer)

Neolamprologus multifasciatus

Mbipia lutea spotbar yala swamp

Ilyodon cortesae

Labidochromis caeruleus

Xenotoca eiseni ‘Tamazula’

Xiphophorus maculatus

Rocio octofaciatum

Xenotoca variata

Xiphophorus couchianus

Xiphophorus alvarezi

Julidochromis ornatus

Throughout my time in the club side of the hobby, my tenure with GVAC, there have been a few constants. Steve was one of those constants. It was an extremely rare occasion that he wasn’t present at a club event. If one took the time to talk with Steve, you could immediately discern his intelligence and wisdom. While Steve was easily recognized, his size was a bit intimidating, his personality was anything but. I wouldn’t say he was shy, reserved would be a better description. Welcoming to all, truly a servant to GVAC while providing guidance to the club. A dedicated and talented aquarist, I am proud to have had him as a friend, and miss him. Proudly I carry my memories of Steve, in my head and in my heart, in this way he’s not really gone. The life lesson I take from having Steve as a friend is, be open and welcoming to all you meet, extend a hand in friendship. GVAC is a family to me, and this family has had yet another devastating loss, like all families we can lean on one another to get through difficult times.

Mike Monje, Member at Large GVAC

Ever since I’ve been a member of the Grand Valley Aquarium Club, I can recall Steve Hosteter showing up to all of the meetings, and auctions with his family. I know he loved his family, and it showed in the quality, and quantity of time he spent with them.

I think of GVAC as a large extended family, and we just lost a great, active member who gave his time to the club, and every member that came to him. Steve was always a welcoming face at our meetings. He was extremely kind, a great listener, and always had solid advice.

Life is truly short and the greatest and most valuable gift we can give is our time. Steve’s time with us was cut short, but while he was here, he gave those he loved, including our club, the most valuable gift he could give, his time.

Chris Carpenter, Vice President of GVAC

STEVE HOSTETER HAP HISTORY

Vegetative

Anubias Coffeefolia
Anubias nana
Crypt wendtii
Cryptocoryne Balanasae
Cryptocoryne parva
Echinodorus bleheri
Echinodorus Osiris
Lemna minor
Najas guadalupensis
Pista Strotiotes
Riccia fluitans
Rotala indica
Vallisneria sp.
Vesicularia dubyana
Lysimachia nummularia
Rotal sp. 'Vietnam'
Subwassertang
Ludwigia repens
Heteranthera zosterifolia
Rotal sp. 'Bangladesh'
Microsorium pteropus 'Windelov'
Salvinia cucullata
Cryptocoryne usterinna
Hydrocotyle leucocephala
Nymphaea zenkeri (Red Tiger Lotus)
Bacopa monnieri
Salvinia natans
Staurogyne repens

Rotala nanjenshan
Enchondorus tennellus
Ceratophyllum demersum
Aponogeton crispus
Cryptocoryne beckettii
Lobelia cardinalis
Ludwigia sp 'Atlantis'
Eichhornia crassipes (Water Hyacinth)
Cryptocoryne sp 'Florida Sunset'
Vallisneria Gigantea (Giant Val)
Rotala sp. "yao yai"
Pogostemon erectus
Micranthemum umbrosum (Giant Baby's Tears)

Flowering

Eichhornia crassipes
Nymphoides sp. "Colorshifting"
Pontederia cordata
Aponogeton crispus
Cabomba furcata
Nymphaea zenkeri (Red Tiger Lotus)
Alternanthera philoxeroides (Alligator Weed)
Sagittaria lancifolia (Arrowhead Duck Potato)
Cryptocoryne balanasae
Echinodorus Osiris

Sexual

Aponogeton crispus





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Address correction required