Grand Valley Aquarium Club

GVAC Tank Notes

April—May 2014 Issue 64

Upcoming Meetings:

March 22:	GVAC Spring Auction
April:	Ted Judy W. A. Cichlids
May:	HAP/BAP
June:	Greg Steeves L. Vic. Cichlids
July:	GVAC Picnic Members Only
August:	Mike Tiano Ponds

Inside this issue:

GVAC Spring Auction March 22

Location: Home School Building Gym
5625 Burlingame AVE SW
Wyoming MI 49509

Everyone is welcome and you do not need to be a club member to buy or sell.

Registration: 9:30am—11am

Auction: 11am— until all items are sold!

Rules: www.grandvalleyaquariumclub.org under “Auction Rules” tab

Bag Limit: Each seller is limited to a total of 50 items.

Buy It Now: Table opens at 9:30am & closes at Noon

Preregister: Contact Roger Miller: miller.roger1 @att.net, for a seller code.

2014 Board of Directors

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GVAC Fellows

The following is a list of Fellows of Grand Valley Aquarium Club. These are members who have contributed to making GVAC a successful club. They have held many positions within the club and donated countless hours doing those tasks that would not be completed except for their hard work. New Fellows are nominated by current fellows and voted on by the general membership.

Tim Boelema	Ben VanDinther
Fin Nielsen	Jeff Vander Berg
Ken Zeedyk	Patrick Miller

Don't forget to thank them when you see them at meetings or other events.

GVAC Mailing address: Grand Valley Aquarium Club
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Grandville, MI 49418-0325

GVAC Website: www.GrandValleyAquariumClub.org

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Patrick Miller
GVAC Editor
PO BOX 325
Grandville, MI 49418-0325

Presidents Corner

The first quarter of 2014 is behind us already! So far GVAC has had a hand's on LED light building workshop, our winter swap meet, a presentation on plants and planted aquariums by Karen Randall, and our rare fish night with a box swap! We're off to a great start, and the year is just starting! Ted Judy, Greg Steeves, Mike Helleweg, and Rachel O' Leary, are up and coming speakers that we've already booked and confirmed for this year! So, 2014 *The Year of the FISH,* is well under way!

I would really like to hear from any members who've taken me up on my 2014 challenge, or better yet submit some pictures, or write a brief article on your experiences with the challenge.

"I challenge each and every one of you to pick one thing: travel to another club for a meeting or auction, attend a fish event that you've never attended before, try a collecting trip, BAP a fish, HAP a plant, sell at an auction, keep a C.A.R.E.S. species, write an article, submit a picture of your fish / tank, volunteer at an auction or event, pick something related to the club that you've never tried before and try it in 2014!"

Spring is right around the corner, okay it may be a very long corner to turn! However, with spring comes the summer tubbin' season. If you've never tried this before I recommend trying it. The colors your fish take on during their summer vacation outside can be breath taking. Some difficult to breed species, are a lot easier to breed in this more natural setting, plants allowed to break the surface will often flower outside. Besides, you're already outside enjoying the weather, why not take your hobby with you?

Please support our sponsor's, your help in supporting those who support us makes the hobby and the club stronger and more vibrant. Don't forget to update your *C.A.R.E.S.* status with Cyndi Westra, and most importantly, it's a hobby so have FUN!

I never met a fish I didn't like,

Mike Monje

Please support those who support GVAC

Blue Fish Aquarium
Preuss Pets
ADG/Aqua Design Amano USA
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Aquatic Gardeners Ass. - Karen Randall
Aquamaid Supplies
Boyd Enterprises
Cichlid Press
CichlidBreeding.com
Doctors Foster & Smith
Florida Aquatic Nurseries
Hagen
HBH Pet Products
Hikari USA
Kordon—Novalek
Marineland
Oddballfish.com
Ocean Star International
Penn Plax
Pet Supplies Plus
Pet Connection
Python Products
Repashy Superfoods
San Francisco Bay Brand
Seachem Laboratories, Inc.
SpectraPure
Ted's Fishroom
Tetra
TFH—Tropical Fish Hobbyist
Wardley—A Hartz Company
Zoo Med Laboratories Inc.

Fish Calendar of Events

April 5	Michiana 'Buck-A-Bag' auction Concord Mall, 3701 S. main, Elkhart IN Registration 9am—Auction 11am www.michianaaquariumsociety.org
April 5	GDAS Spring Auction Good Sheppard Lutheran Church 814 North Campbell RD, Royal Oak MI 48067 Registration 9:30am—Auction 11am www.greaterdetroitaquariumsociety.org
April 12	**GVAC Meeting** **Speaker: Ted Judy** **West African Cichlids**
April 27	GCCA Swap Meet Best Western Plus 4400 Frontage Road, Hillside IL 60162 10am—2pm central time www.gcca.net
May 10	**GVAC Meeting** **Program: HAP/BAP**
May 15-18	ALA Convention St. Luis MO www.ALAConvention2014.com
May 23-25	GCCA Classic Best Western Plus 4400 Frontage Road, Hillside IL 60162 www.gcca.net
May 23-25	American Killifish Association Convention Syracuse NY www.aka.org
May 31– June 1	Michigan Guppy Breeders/IFGA Show Hilton Suites Hotel 2300 Featherstone Rd, Auburn Hills, MI 48326 www.michiganguppybreeders.com
June 4-8	NANFA Convention Western North Carolina www.nanfa.org
June 14	**GVAC Meeting** **Speaker: Greg Steeves** **Lake Victoria CARES**
July 12	**GVAC Picnic** **Location: TBA**
July 10-13	ACA Convention Louisville KY www.aca-convention.com
August 9	**GVAC Meeting** **Speaker: Mike Tiano** **Ponds**
September	**GVAC Meeting** **Speaker: Rachel O'Leary** **Nano Aquaria**

Fertilizers for Dummies

By Justin Sarns

So you want to do a high tech planted tank? You have the lighting, CO2, and substrate figured out. Now it's time for fertilizers. If you are anything like I was, you don't have a clue on what to use. Dry, liquid, substrate, root tabs, which one is best? Each one has its purpose and hopefully this article will help clear up some of the confusion for you. It is important to know that fertilizers provide two types of chemicals, macronutrients and micronutrients. The macros are nitrogen compounds that aid in growth. The micros are small doses of minerals, such as iron, potassium and calcium that aid the plant in growth and coloration.

Substrate: Ok, so it's not really a fertilizer. However, a good substrate can provide nutrients to the plants in the same way fertilizers would. This can be especially helpful for plants with large root structures that require iron to sustain color. I personally have had success with Eco-Complete and Fluval planted tank substrate. I have also heard that fluorite is a good choice, but it can be messy when setting up.

Root Tabs: These can be placed in the substrate to provide nutrients for plants with large root masses, such as swords and crypts. They are effective, but must be replaced periodically. This is a great choice for a hands off approach in a tank with few stem plants.

Liquid fertilizers: This type of fertilizer is probably the most readily available. The most common, and effective in my humble opinion are the Seachem Aquavitro, and Seachem Flourish. They are readily available, and normally need to be dosed once or twice a week. The downside to these fertilizers is that they are expensive, and you have to use multiple types to cover the full realm of micronutrients. If you want to use a little more fertilizer than root tabs than this is a simple effective solution.

Dry Fertilizers: Dry ferts are effective and very affordable. A supply for a 20-gallon aquarium from Green Leaf Aquatics is $25 shipped to your door and will last months. The downside is that it is very labor intensive. Chemicals must be added daily, and a 50% water change needs to be carried out every week. However, the growth with this type of fertilization is incredible. It is common to have to trim plants on a daily basis. If you are looking for an affordable, effective fertilizer and don't mind the extra work this is by far the best choice.

Note: This is using the EI method of dosing for dry fertilizers. Other methods exist, but I am unfamiliar with them. This method is designed to work with CO2 injection and high light. It can cause high algae levels if used under different conditions.

I hope this article has helped clear up some of the confusion around fertilization in the aquarium. Don't be afraid to give some a try, your plants will love it!

Three Dwarf Danios I Love:
Danio margaritatus- Danio erythromicron -Danio choprae

By Heather Burke

Whenever someone asks what my favorite fish is, my default answer is always "Celestial Pearl Danio." It's not hard to understand why; the so-called CPD is a very beautiful little fish. When it first arrived in the hobby circa 2007, it was an immediate hit. I was not excluded in the rising fandom. Since then, an assortment of other dwarf Danios have caught the eye of aquarists. Many of them are stunning in their own right, resembling a splash of color and agility in a nano-friendly size. And most of them are quite easy to spawn and raise in captivity. For those reasons, I would like to highlight three such fish I recently spawned in my tanks. And which have also earned my eternal appreciation.

1. *Danio margaritatus*—The Celestial Pearl

The celestial pearl Danio, or CPD, is a true gem in the hobby and thus always commands attention and value. However, what I have found is that when I seek these fish, they cannot be found. When I have tracked them down again, they become numerous. Such is the ebbing and flowing of species in the pet trade. This fish has been in my tanks on and off for years. Finally frustrated with this game of cat and mouse, I decided to set up permanent housing for CPD in the last year. As far as long-term husbandry is concerned, the CPD require copious offerings of micro-foods. Baby brine shrimp, microworms, and daphnia in all forms are especially relished. Keeping them at elevated temperatures negatively influences their health as it speeds up the metabolism and the fish will skinny out quickly as a consequence. Mine are always at room temperature (68-72 degrees F). They thrive in groups in small, shallow tanks (think 5 gallons). Moss or plant clusters are essential to make them feel comfortable. This also serves as excellent spawning media as eggs are usually found scattered beneath. I probably perfected my method for fry removal when I first dealt with this fish years ago. Today, it remains unchanged.

Once mature, the fish can be expected to mate almost daily. The eggs are laid in small quantities. Frequent siphoning of the gravel can usually yield a decent amount of eggs and fry after a week or two, depending on how many females are in the spawning group. My strategy then is just to shine a light into the bucket and observe for movement or eggs. Patches of detritus settled in the bottom can then be basted into a clear Tupperware and further inspected. Fry and eggs are then removed by eye-dropper into either a holding cup or a rearing tank. My policy is to sit all viable eggs in plastic cups until they hatch and are free swimming. Once free-swimming, I simply dump the cup into a 2.5 gallon and get feeding. My go-to diet for these fish is liquid fry food initially with lots of supplemented powdered and live foods. Growth rate is fast and survival is good once accepting BBS. A healthy clump of java moss in rearing tank also helps the process.

2. *Danio erythromicron*—The Emerald Danio

This fish, like the celestial pearl, has migrated into the Danio category. However, both fish were once considered "*Microrasbora*." The current ruling is that both the emerald and CPD are more closely related to each other than other Danios or Rasboras (they can interbreed- beware!). However, they are still recognized in the Danio genus as of this writing. They fall into the category I like to call "Dwarf Danio." Hence the fancy article derived from my own categorization.

Danio erythromicron is a fish I have kept since my Sweet Sixteen. It was, quite literally, a gift on my 16th birthday from a boyfriend at the time. Anywho, personal story aside, it's a fetching little fish with blue bars and a greenish body. It flutters its fins around like the CPD and is often very shy. It was a deep desire of mine to breed them since my first failure with the species. I succeeded in summer of 2013 in a slew of other spawning firsts. Not surprisingly, they breed almost exactly like the celestial pearl does. Only, it seemed much less frequent. I got fry out of them maybe once every two weeks, but in larger batches. I could probably get 20 fry/eggs in one go of the bucket method, and there were only four fish in the group. I used sand and marbles in this set-up. It was three gallons. The survival rate was astonishing on these guys, and I probably raised more emerald Danios than anything else that summer.

3. *Danio choprae*—The Glowlight Danio

The glowlight danio was a surprise spawn for me. Ultimately, I realized that this fish is super prolific. It took a few batches to truly believe. A little harder to sex since the body is deeper in general, maturity still gives way to slimmer males and fatter girls. I ended up with the jackpot- three girls and one boy and lots and lots of eggs. I wager to this day, I could siphon 20+ eggs and fry out of their species tank at any given moment. I never saw a huge reduction in numbers no matter how many days post-spawn. Of course, I never saw free-swimming fry in the parent tank. It mattered not, as the fry are super gluttonous and thrive in a separate rearing tank. These fish are generally more surface oriented than the other two dwarf danios spoken for, and I include them in this group because they are still fairly petite animals. And my, do those colors shine.

The spawning for *Danio choprae* is continual, as I noted earlier. It is, however, essential to have coarse gravel to trap the eggs and a good clump of moss to entice them. I use pea gravel for all of my spawning tanks as it is cheap, effective, and aesthetically pleasing. With all of the Danios I was spawning, I would mark my egg-cups with a sharpie to ensure no mix-ups were made. But the method is the same for all three species. I used a 2.5 gallon bowfront for the glowlight spawning and they were content to lay day after day.

Seeing that I have filled a decent amount of space with the subject, I shall end with this challenge- IF you have a spare 2.5 gallon tank laying around, why not breed one of the dwarf Danios? It's easy, I promise. And after watching the embryo and fry development of all three species mentioned, it really is a rewarding experience.

Happy fishkeeping!

2014 BAP January—March

Heather Burke—4
- *Danio margaritatus*
- *Danio choprae*
- *Pseudosphromenus dayi*
- *Limia perugiae*

Patrick Miller—3
- *Metriaclima estherae*
- *Phallichthys tico*
- *Nomorhamphus ebrardtii*

David Gruszecki—3
- *Aulonocara baenschi*
- *Copadichromis borleyi*
- *Xenotoca eiseni*

Justin Sarns—2
- *Labidochromis caeruleus* zebra lundo
- *Haplochromis omnicaeruleus*

Kory Voodre—2
- *Lamprologus ocellatus* 'gold'
- *Zoogoneticus tequila* 'Lake Chapala'

Chris Carpenter—2
- *Neolamprologus leleupi*
- *Girardinus falcatus*

Steve Hosteter—1
- *Rocio octofasciata*

Dan Kraker—1
- *Labeotropheus trewavasae* 'lundu'

Melissa DeHaan—1
- *Glossolepis multisquamata* 'Pagai'

Nicole Westra—1
- *Poecilia reticulata*

Michael Miles—1
- *Poecilia reticulata*

Roger Miller—1
- *Fundulopanchax gardneri*

Andrew Kalafut—1
- *Melanotaenia lacustris*

Steve McDonald—1
- *Girardinus metallicus*

2014 HAP January—March

Andrew Kalafut—7
- Vegetative
  - *Najas guadalupensis*
  - *Blyxa japonica*
  - *Echinodorus xingu*
  - *Heteranthera zosterifolia*
  - *Rotala* sp. 'Vietnam'
  - *Persicaria* sp. 'Kawagoeanum'
- Flowering
  - *Persicaria* sp. 'Kawagoeanum'

Steve Hosteter—6
- Vegetative
  - *Nymphaea zenkeri*
  - *Bacopa monnieri*
  - *Cryptocoryne usteriana*
  - *Hydrocotyle leucocephala*
- Flowering
  - *Cabomba furcate*
  - *Nymphaea zenkeri*

Melissa DeHaan—5
- Vegetative
  - *Ceratophyllum demersum*
  - *Sagittaria subulata*
  - *Echinodorus angustifolia*
  - *Ludwigia Palustris*
  - *Microsorum pteropus*

Justin Sarns—3
- Vegetative
  - *Nesaea crassicaulis*
  - *Lilaeopsis novae-zelandiae*
  - *Cabomba furcate*

Bob Wesolowski—3
- Vegetative
  - *Echinodorus bleheri*
- Flowering
  - *Anubias nana*
  - *Cryptocoryne usteriana*

Roger Miller—2
- Vegetative
  - *Spathiphyllum wallisii*
  - *Micranthemum umbrosum*

Ben LeClear—1
- Vegetative
  - *Echinodorus amazonicus*

Patrick Miller—1
- Vegetative
  - *Aponogeton undulatus*

Microgeophagus ramirezi – The Blue Ram

Buy Roger Miller

Microgeophagus ramirezi, more commonly known as the Blue Ram, is a popular aquarium fish that is known by almost everyone with a little fish keeping experience. It is one of the so called "Dwarf Cichlids" because it stays fairly small – maxing out at about 3 inches in length. While quite peaceful , especially for a cichlid, the will show some aggression when protecting a spawn/spawning site or fry – just enough to keep an intruder at bay, but not enough to cause physical damage to the interloper.

One quality, that I find quite endearing (being that I like to cultivate live plants in many of my tanks), is that *Microgeophagus ramirezi* does not possess is the desire to constantly rearrange the substrate and tank décor as many cichlid species find necessary to do. This makes them ideal candidates to inhabit a planted tank where they do seem to really appreciate the security/cover provided by live plants.

Relatively soft water (I use 2/3 reverse osmosis water mixed with 1/3 tap water), slightly acid with a temperature of 82-86^0 F are the water conditions needed to allow this species to thrive. Combine these optimum conditions with good nutrition and the blue, yellow & red coloration of the fish will become quite brilliant, making for quite a stunning looking fish.

Microgeophagus ramiresi , Electric Blue Ram, photo by Robert Nerli

I purchased 6 juvenile/young adult fish with the intention (hope) of getting a pair or two as they grew up, and then trying to induce them to spawn. The fish were housed in a 29 gal., heavily planted tank with driftwood, rocks, & some "cichlid stones", and allowed to grow. As they grew older 2 pairs formed. With the above mentioned water conditions and by feeding them a varied diet of live blackworms, a variety of frozen foods, and assorted flake foods it did not take them long to start spawning. Most of the time the different pairs would spawn at different times, though occasionally they would do so at the same time. Sometimes they would spawn on a piece of driftwood, other times a rock or cichlid stone and once-in-a-while a pair would dig a small pit in the substrate where they would spawn.

Several of the first spawns (of both pairs) were left with the pair with the hope that they would raise them on their own. After spawning, the pair would guard the eggs for a day or two after which they would eat them. Obviously they were not interested in becoming parents (I was starting to think they might be on to something here , after surviving the raising 3 teenagers of my own). After this I started removing the eggs to try to raise the artificially. Eggs were placed in a small plastic container of water with some methylene blue and an air stone (for aeration) , usually, after three days the eggs would hatch and there would be lots of "wigglers". Then after another 4 or 5 days the fry would have used up their yolk sacks and needed to feed. It was at this point that I lost many spawns. The fry are so tiny they cannot even eat microworms (which is what I was attempting to feed them) and they would starve to death. Obviously, a source of smaller food was required. I knew that infusoria was what I needed and I knew the process/procedure for growing a culturing. My problem being that every time I've tried it, I failed miserably.

The saying is that "necessity is the mother of invention" (or something to that effect) but in this case desperation played a very large roll. Into another plastic container of water I added a few pieces of hornwort, some dried plant matter and a little "sponge grunge". The container was then placed were it would be under light several hours a day and allowed to age. A few days later the latest spawn had changed from wigglers to fry and needed to fed. The fry were transferred (carefully) to the container I had prepared earlier hoping that by now there would be something growing in it that would be small enough for the ram fry to eat. An air some was added and every day very, very small amounts of microworms and powdered flake were added just for good measure. Every second or third day I would check to see if any were still alive (some were) and I would change about half of the water. Enough survived, using this method, to get big enough to eat baby brine and eventually finely crushed flake. Finally, after several months of trying , I'd managed to raise enough for a BAP with several left over (saying I was pleased is somewhat of an understatement).

Spawning and raising *Microgeophagus ramirezi* proved to be quite and challenge for me along with being an interesting learning experience. But as I have more yet to learn and as long as I have Blue Rams that will spawn I'll continue on attempting to improve and refine my technique.

Newsletter Opportunity

It is hard to believe that I have been publishing the club newsletter for almost 5 years, how time flies. In an effort to get more people involved in the club and lessen some of the things that I do that take me away from 'playing' with my fish I am asking for help.

GVAC participates with a few other clubs on an exchange program. This is a program that should benefit hobbyists in the clubs that participate, however, I have done a poor job of performing this job. The job entails communicating with other clubs (I have a list that should be expanded) to receive their newsletters, collate them, and then sending the links or copies to Ken so that he can send them out to our members on a monthly bases. This person would then also need to send a copy of our Tank Notes to those clubs. Once set up it is not much work but it takes someone who has a computer, is organized and committed to doing it for an extended period of time.

If you are interested in doing this job please contact me, Patrick the editor, or a board member and let them know.

GVAC C.A.R.E.S. *Placidochromis sp."phenochilus Tanzania"*

By Mike Monje

Sometimes referred to as the Star Sapphire Cichlid, or the Mirror Ball Cichlid, *Placidochromis sp."phenochilus Tanzania"* carries the CVU rating in the C.A.R.E.S. program*. It's very unusual for me to keep any particular species for more than a year, that being said I've been keeping *Placidochromis sp. "phenochilus Tanzania"* for almost four years now. I registered my colony with Grand Valley Aquarium Club's C.A.R.E.S. liaison, (Cyndi Westra), in 2013.

Placidochromis sp."phenochilus Tanzania" is a undemanding Malawi Haplochromine, albeit a rather large species requiring a large display tank, I wouldn't recommend anything smaller than a 75 for a group of three, (one male with two females). I house mine in a 125 tank (6 foot long), this gives my group plenty of open swimming space. The quality that I like most about this species is that it's like keeping a different fish as time goes by.

I acquired my group at a GVAC auction, they were about 1" to a 1 ¼" long primarily a silver color, black barring and a nice black throat. I dropped them into a 20 long to start growing them out. At about 2" some of the fish started developing a blue head, (later I would discover these were to be males). At about 3" long the males develop a solid blue body, the females remain a silvery / blue with black barring. The blue coloration in the males keeps getting a deeper / richer color until they get somewhere between 4" and 5", depending upon the fish. Then they start to develop metallic white blotches on their body, this is where the nickname Star Sapphire and/or Mirror Ball comes in. No two males will develop the same metallic white blotching, each one is distinctive. As the fish continue to grow and age the colors intensify, the blotching in the males continues to increase, the females develop more of a blue sheen to them, like a fine wine they continue to improve with age. The males will top out at about 10" the females slightly smaller 6" or so.

Hobby-wise this is as close to care-free species as you will find. They are quite adaptable, will accept almost all types of food, I've never seen a case of bloat with them. They mix well with most other African cichlids, (though I would caution against the more aggressive species as these are a rather mild mannered species). Aquarium décor is just as undemanding, a sandy substrate, a few rock piles, temperatures from the mid 70's to low 80's. I keep my colony with a group of *Metriclimia greshaki*, "Ice Blues" and a pair of *Neochromis omnicaeruleus.*

The fish will start to breed at about four inches, the females hold about three weeks, and are generally good holders. However, if you want fry you will need to remove the female at three weeks or slightly before. I have *M. greshaki* fry survive all the time in this tank but I've never had any *Placidochromis* fry survive, unless I remove the female. I've removed females to 2.5 gallon and let them spit the fry naturally, and I've stripped the females of fry at the head and tails stage of development. In both cases the fry are quite hardy, and easily raised on crushed flake, and frozen baby brine shrimp. The fry grow rather quickly to the 1" stage (about four months or so). The aquarist really needn't do anything to induce a spawn, the male will prepare a small pit in the sand, circle it a few times and the next thing you know you have a female, (or three), holding eggs. I've never had to do anything to entice them to spawn. A word of caution here, the females will hold between 20 and 50 fry, the fry are quite hardy, losses will be minimal. So, if you strip more than one female be prepared for a lot of fish to raise! That being said, letting the females hold and release in the main tank is like free live food!

Placidochromis sp."phenochilus Tanzania" is a popular Malawi Hap in the hobby, although it can be pricey. Fully colored adult males can go for $35.00 to $45.00 and adult females around $20.00. Juveniles can be found in stores for around $10.00 to $20.00 depending on size. This species is usually at club auctions and swaps as well. Currently this is not a rare or hard to come by species in the hobby. Through the C.A.R.E.S. program we can keep it that way!

*CARES Classifications
If a species is approved for inclusion on the CARES Conservation Priority List and that species is not on the IUCN Red List, or members of the CARES Priority List Team believe, in most cases through personal field observations, that a different classification is warranted, the following classifications will apply.

Key	Classification	Description
CNT	**Near Threatened**	Species which are close to qualifying for classification to Vulnerable.
CVU	**Vulnerable**	Species facing a high risk of extinction in the wild in the medium term future.
CEN	**Endangered**	Species facing a very high risk of extinction in the wild in the near future (includes species on the ALA list (2) shown as Threatened).
CCR	**Critically Endangered**	Species facing an extremely high risk of extinction in the wild in the immediate future (same as 'EE' used by de Rham and Nourissat).
CEW	**Extinct in the Wild**	Known only to survive in cultivation, in captivity, or as a naturalized population (or populations) well outside the past range.

GVAC March meeting, LED workshop

Grand Valley Aquarium Club
PO BOX 325
Grandville MI 49418
Address correction requested

Grand Valley Aquarium Club

Meetings are held on the second Saturday of each month at 7PM

Holliday Inn Express
Great room, just turn right at the big fish tank
6569 Clay Ave SW
Grand Rapids MI

There is no fee and everyone is welcome to attend!

Membership Benefits

GVAC T-Shirts

With Membership Card	$10ea
Without Membership Card	$15ea

Store Discounts

Blue Fish Aquarium*

10% off livestock

20% off bulk food (does not include 5lb boxes)

Club nights Tuesday & Wednesday 20% off livestock.

*Must show GVAC membership card to receive discounts