



GVAC Tank Notes



January—March 2013

Issue 59

Upcoming Meetings:

January Ken Zeedyk
Breeding difficult fish

February Jeremy Basch

March Mike Hellweg

SWAP MEET 2013

January 12

Location Home School Building
5625 Burlingame SW
Wyoming MI 49509
Time 10am—2pm
Cover \$3per person or \$5 per family
Contact Patrick Miller, pmlife4@att.net or 616-336-5437 with questions, to sell or to show fish.

Inside this issue:

Presidents Message	3
Calendar	4
The Assassin Snail	4
Dry Fertilizers	5
We Have Winner	5
2012 BAP Totals	6
Side by Side Planted Tank Substrate	7
2012 HAP Totals	8
Bristle Nose Pleco Grow out Contest	9
My Experiment with L. Callipterus	10
2012 GVAC Awards	11
HAP Invasive or Protected	12
Grow Out Contest	13
Pogostemon erectus	13



GVAC Spring Auction

March 23

Location Home School Building
Time Registration 9am-11am
Auction 11am—everything is sold
Preregister Contact Roger Miller at miller.roger1@att.net

2013 Board of Directors

President	Mike Monje	exstreamaquatix@gmail.com
Vice President	Ben VanDinther	aquariumservices@sbcglobal.net
Treasurer	Roger Miller	miller.roger1@att.net
Recording Secretary	Patrick Miller 616-336-5437	pmlife4@att.net
Corresponding Secretary	Tom Siegfried	tomsiegfried@charter.net
Sergeant-at-Arms	Chris Carpenter	christojanet@hotmail.com
Members at Large	Justin Sarns	sarnsj@gmail.com
	Pat Hartman	phat711@sbcglobal.net
	Kory Voodre	kvoodre@gmail.com
	Scott Tetzlaff	thefishguy@triton.net

Committee Chairpersons

Membership	Ken Zeedyk	zekeshouse@wmol.com
Public Relations	Ken Zeedyk	zekeshouse@wmol.com
Breeders Award Program	Tom Siegfried	tomsiegfried@charter.net
Hort. Award Program	Steve Hosteter	fishguy311@yahoo.com
Raffle	Tom Siegfried	tomsiegfried@charter.net
Program Director	Ben VanDinther	aquariumservices@sbcglobal.net
Website Administrator	Ken Zeedyk	zekeshouse@wmol.com
Newsletter Editor	Patrick Miller 616-336-5437	pmlife4@att.net

GVAC Fellows

The following is a list of Fellows of Grand Valley Aquarium Club. These are members who have contributed their effort 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

Fin Nielsen

Jeff Vander Berg

Ben VanDinther

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

PO BOX 325

Grandville, MI 49418-0325

GVAC Website: www.GrandValleyAquariumClub.org

Reprint Policy:

Articles appearing in the Newsletter of the Grand Valley Aquarium Club may be reprinted in a newsletter (not on website or e-mail) by any non-profit aquarium organization as long as the author and GVAC are given written credit. Two copies of the publication in which the article is printed must be sent to:

Patrick Miller

GVAC Editor

PO BOX 325

Grandville, MI 49418-0325

Presidents Message

Greetings GVAC,

Hope your holiday season has been full of family, friends, fun and fish! This will be my last President's message, (at least for this year), so I wanted to thank all of you for participating in our club during my tenure. With your commitment and dedication GVAC has been able to see its membership grow in 2012, has put on some pretty successful events, pulled in great speakers and secured the 2013 ALA national convention for Grand Rapids. I look forward to still participating in the club, and don't plan on shying away from helping GVAC with events and planning, so I will see you around. You just won't have to listen to me at the monthly meetings anymore.

A very special thanks goes out to the 2012 Aquarist of the Year, Patrick Miller. He has been one of the driving forces behind GVAC's success for many years, and has put in countless hours as Swap Meet Chair, Awards Chair, Newsletter Editor, bowl show and grow out contest instigator/coordinator, HAP backup, meeting speaker and 2012 summer picnic host. Patrick has done a lot of work for our club, so the next time you see him please give him a heartfelt thank you. A Founders would probably be appreciated too.

Blue Fish Aquarium in Grandville has long been a sponsor of GVAC, and this year was no different. They have assisted us with providing hotel rooms for a number of our speakers, and have always treated us well when visiting their store. They also worked with us in securing some rare and unusual fish for one of our programs this year. Their employees put a lot of time and effort into acclimating, housing and re-capturing the fish for us. A hearty thanks to Ben, Jeff and their crew!

In closing please volunteer your time at the upcoming ALA event in April. It is going to take all of us to make this event a success, and it will pay off in return by being a really fun and exciting event. Tim and the ALA Chairs have some great ideas,

including a Gonipodium Galleria on the 4th floor of the hotel, so plan on booking a room for the event. Also start working on your newsletter articles about livebearers for the spring issue of GVAC Tank Notes. Great opportunity to showcase your writing talents and breeding experiences!

Happy Fishkeeping,

Ken Zeedyk



Ken Collecting Darters in December

Please support those who support GVAC

Blue fish Aquarium
Preuss Pets
ADG/Aqua Design Amano USA
Amazonas Magazine
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.

Calendar of Events

- January 12** **GVAC SWAP MEET**
Home School Building
10am—2pm
Contact Patrick Miller pmlife4@att.net to sell
\$3 per person or \$5 for families
- January 12** **GVAC Meeting**
Ken Zeedyk
Topic: Hard to breed fish
- January 19** **MCA Winter Auction**
876 Horace Brown DR. Madison Heights MI
<http://michigancichlid.com>
- January 27** **Greenwater Winter Auction**
Apollo Rec Center 12521 S. Kostner, Alsip IL
Registration 9:30am—Auction @ 11am
www.gwasoc.org
- February 9** **GVAC Meeting**
Jeremy Basch
Topic: Catfish
- February 16** **MCAS Winter Auction**
876 Horace Brown DR. Madison Heights MI
Registration @ 9am—Auction @ 10:30am
www.motorcityaquariumsociety.com
- March 9** **GVAC Meeting**
Mike Hellweg
- March 9** **SWMAS Spring Auction**
Plainwell Community Center
Registration 8:30am—Auction 11am
www.swmas.org
- March 23** **GVAC Spring Auction**
Home School Building
Registration 9am—Auction starts at 11am
- April 6** **Michiana Aquarium Society Spring Auction**
Concord Mall, Elkhart IN
Registration 9:00am—Auction @ 11am
www.michiana-aquarium-society.org
- April 13** **GVAC Meeting**
Topic: TBA
- April 25-28** **ALA Convention hosted by GVAC**
Grand Rapids MI
www.livebearers.org
- May 11** **GVAC Meeting**
Chuck Davis

The Assassin Snail (Clea helena)

By Tom Siegfried

I bought a group of nine Assassin Snails about a year ago from a seller on Aquabid. I thought they looked pretty cool in pictures and was intrigued by their diet. They eat...drum roll please, RAMSHORN snails. They're no Botia loach or puffer, but they do tend to keep unwanted snail populations under control. They also can be spawned in captivity with little effort. Assassin snails spawns seem to be infrequent, but they do multiply (in a controlled manner) over time. I have them housed in a 7 gallon nano tank, a 75 gallon Tanganyika cichlid tank, and have recently rehomed many of them across several 10 gallon tanks.

Assassins move fast compared to other snails, love to burry themselves in substrate, and are most visible at night. I have read that 4 adults can clear a 29 gallon of a snail infestation in 6-8 weeks. That may be a stretch..., but I can tell you I have hundreds of "empty" ramshorn shells in my 75 gallon tank. Although they're not algae eaters, they are quite satisfied with sinking pellets, algae wafers (due to the proteins in them), and other regular foods.

Go ahead and give them a try.

Dan Kraker submitted the following photos of some of his nice Cichlids.



Dry Fertilizers for the Planted Aquarium

By Andrew Kalafut

All of the plants that I have turned in for HAP points, as well as 95% of the plants I have sold at the auctions and mini-auctions have all come from a single 125 gallon aquarium. It is not actually difficult to grow great aquarium plants; three things are necessary: good lighting, CO₂, and fertilization. This article is about the third necessity, the fertilizer.

The nutrients we need to provide through fertilizer can be split into two categories: macronutrients and micronutrients. The main distinction between these is that macronutrients are needed in higher concentration. The macronutrients are the same nutrients whose quantities you see indicated by the three numbers on any bag of garden fertilizer: Nitrogen (N), Phosphorus (P), and Potassium (K). While these nutrients are in your garden fertilizer, this is not a recommended source of these nutrients for your aquarium, as the other ingredients could kill your fish. The micronutrients consist mostly of metals such as Magnesium, Copper, Iron, and several others.

When I first got serious about keeping planted aquariums, I used a commercial line of liquid aquarium fertilizer products. However, this became cumbersome as each product has differing dosage instructions, and it also became more expensive than I would have liked. Instead of using these liquid supplements, another option is possible: buying fertilizer in dry powder form and mixing it yourself.

To my knowledge none of the local aquarium stores stock dry fertilizers, however, these products are readily available in 11b quantities from online merchants. I use Potassium Nitrate (KNO₃) as a source of Nitrogen, Monopotassium Phosphate (KH₂PO₄) as a source of Phosphorus, and Planted CSM+B as a source of micronutrients. The first two also provide some Potassium, therefore I have not used a separate source of this nutrient, although Potassium Sulfate (K₂SO₄) is available for this purpose. For the amounts I need, 11b for all except the Potassium Nitrate should last over a year.

Because we are buying these in powder form, sadly no dosing instructions are available on the back of the bottle. However, advice from the Internet is easily available. I use a method found online called "Estimative Index". In this method, instead of measuring the actual concentration of the nutrients in the tank and dosing accordingly, the amount of fertilizer necessary is estimated, intentionally a little bit on the high side. It is commonly recommended using this method to do a 50% water change every week to make sure nutrients do not build up to levels harmful to the fish.

I mix each fertilizer in a separate 500mL bottle. For the Plantex and the Monopotassium Phosphate, I use 1 Tbsp of powder, and fill the rest of the bottle with tap water. For the Potassium Nitrate, I do the same only using 4 Tbsp of powder, as this nutrient is needed in larger quantities. On alternating days, I add 30 mL each from either the Plantex bottle or the two others. Because components of the Plantex can react with the macronutrients, dosing both at the same time should be avoided. For different size tanks, the amount to add should be scaled accordingly, or the correct amounts for various tank sizes can be found online.

Fertilization is not only useful for tanks with powerful lighting

and CO₂ injection. I have noticed a difference when using the fertilizer on a normally lit 30 gallon aquarium with no CO₂ added. However, because the plants will not use the nutrients as quickly the amount and frequency should be scaled down. On this tank, I add 5 - 10mL of each once a week, with the Plantex being added the day after the other two.

This system has provided me with healthy plants, but does not solve all problems. For example, I recently noticed that my red plants were looking weak and not as red as they should be. For this reason, I have begun adding 1 tsp of Iron Chelate to the same bottle as the Plantex when I mix it. I have only been doing this for a couple weeks, but the small amount of Cabomba furcata that I still have is looking much better. Additionally, I recently tested my tank water and found high nitrate and phosphate, although my tap water has very little of either. I believe this is caused by not providing sufficient Potassium, and plan on starting to fertilize with Potassium Sulfate soon.

We Have Winner!

By Chris Carpenter

This year Patrick Miller brought back the Grow out contest to Grand Valley Aquarium Club. Each round the participant receives fish from a given species and grows them out as large as possible in the allotted time. When it's time to bring the fish back to be judged, the contestant with the biggest fish wins. There were four rounds this year. I won first place in round one with Ilyodon Xantusi. Round two I blanked out and missed. Round three I received second place with Ancistrus sp. I must say that mine looked like dwarfs compared to Dave Gruszecki's the first place winner. In the final round I again slotted second with Girardinus Metallicus losing to Club President Ken Zeedyk. Ken's fish were massive compared to the rest of the fish turned in. Those three spot's were enough to win me the title of Grow out contest overall winner.

This contest gives the people involved the chance to observe and research fish that they may not normally keep. I love expanding my knowledge of fish and this contest gave me the opportunity to do so. These are not the only benefits to the grow out contest, for my first place win I was awarded \$25 GVAC credit and I will receive the same for the overall win. A total of \$50 dollars to spend on fish, for keeping and growing fish. That is a win, win!

I hope this contest continues and grows. I believe the more people that get involved the better it will become. Friendly competition invokes a sense of camaraderie, the better we all know one another, the more connected we feel, the better our club becomes. Who doesn't love a good competition? I know I do, especially one that I win.



2012 BAP Totals

Mike Monje—27

Archocentrus nigrofasciatum
 Bedotia geayi
 Caridinia babaulti sp. Green
 Copadichromis borleyi
 "Crocodile Rocks"
 Gambusia affinis
 Girardinichthys multiradiatus
 Girardinus microdactylus
 Girardinus rivasi
 Girardinus var. "yellow belly"
 Haplochromis sp. "35"
 Hap. Var. Tomato
 Iodotropheus sprengerae
 Mbipia lutea spotbar yala swamp
 Melantaenia lacustris
 Metriaclima greshakei
 Phallichthys amates
 Phalloceros caudimaculatus
 Placidochromis phenochilus
 "Tanzania"
 Poecilliopsis prolifica
 Pseudotropheus elongatus
 "chewere"
 Pundamilia "pundamilia" mwanza
 Skiffia sp. V188
 Skiffia lermiae
 Xiphophorus variatus
 La Minitzia Mx
 Xiphophorus couchianus
 Xiphophorus maculatus
 Xiphophorus milleri Catameco MX
 Xiphophorus xiphidum
 "Rio purification"

Ken Zeedyk—22

Bedotia geayi
 Chapalichthys encaustus
 Corydoras weitzmani
 Etheostoma caeruleum
 Gambusia affinis
 Julidochromis dickfeldi
 Ilyodon cortesae
 Labidochromis carealeus
 Oryzias woworae
 Pseudotropheus elegans "Acei"
 Phallichthys fairweatheri
 Polypterus senegalus senegalus
 Sclesomystax barbatus
 Tanganicodus irsacae
 Thorichthys maculipinnis
 Xenophallus umbratilis
 Zoogoneticus tequila
 Aspidoras cf. albater
 Thorichthys sp. "Mixteco Gold"
 Corydoras similis
 Lepidocephalichthys guntea
 Clea helena
 Culaea inconstans

Justin Sarns—22

Astatotilapia latifasciata
 Aulonocara "Dragon's Blood"
 Aulonocara stuartgranti Hai reef
 Crytocara moori
 Haplochromis sp. 35 tomato
 Haplochromis "Xystichromis"
 sp. "Kyoga flameback"
 Haplochromis sp. Dayglow
 Haplochromis sp. "kenya gold"
 Haplochromis sp. "red tail sheller"
 Labidochromis carealeus
 Labidochromis chisumulae
 Lamprologus ornatipinnis
 Macropodus opercularis
 Mbipia lutea spotbar
 Neocaridina denticulata sinensis
 Neolamprologus multifasciatus
 Pseudotropheus williamsi
 North Makonde
 Ptyochromis sp
 Salmon Hippo Point
 Paralabidochromis sp Fire Uganda
 Pundimilla nyererei Mwanza Gulf
 Pundimillia nyererei "Ruti Island"
 Pundamilia nyererei sp
 "Crimson Tide"

Chris Carpenter—18

Ancistrus sp.
 Aulonocara jacobfreibergi
 Chlamydogobius eremius
 Clea helena
 Geophagus steindachneri
 Hemichromis bimaculatus
 Labidochromis carealeus
 Lamprologus brevis
 Lamprologus melaegris
 Lamprologus ornatipinnis
 Lepidolamprologus hecqui
 Macropodus opercularis
 Neolamprologus ocellatus
 Ophtholmotilapia ventralis "Chitita"
 Pelvichachromis teaniatus Moliwe
 Telmatochromis temporalis
 sp. Shell
 Telmatochromis vittatus
 Xiphophorus maculatus

Patrick Miller—16

Aspidoras cf. albater
 Badis cf. siamensis
 Chlamydogobius eremius
 Corydoras venezuelanus
 Corydoras paleatus
 Girardinus falcatus
 Girardinus rivasi
 Girardinus uninotatus
 Limia tridens

Limia zonata
 Oryzias woworae
 Phalloceros caudomaculatus
 Poecilia butleri
 Metriaclima greshakei
 Fundulus diaphanus
 Melanotaenia splendida splendida

Roger Miller—14

Amatillania nigrofasciatus
 Astatotilapia latifasciata
 Caridina cf. cantonensis "zebra"
 Clea Helena
 Corydoras sp. CW010
 Iodotropheus sprengerae
 Neolamprologus multifasciatus
 Neolamprologus brichardi
 Pseudomugil furcatus
 Pseudotropheus demasoni
 Rhineloricaria sp. "Peru"
 Skiffia lermiae
 Skiffia multipunctata
 Xenophallus umbratilis

Tom Siegfried—9

Ameca splendens
 Ancistrus sp.
 Hemichromis bimaculatus
 Oryzias woworae
 Poecilia spenops
 Gold Dust variant
 Pomacea bridgesii
 Procambarus fallax f. virginalis
 Pseudotropheus saulosi
 Xenophallus umbratilis

Jeff VandderBerg—9

Corydoras panda
 Labidochromis gigas
 Limia tridens
 Placidochromis johnstoni
 Protomelas kirkii
 Protomelas spilontus
 Rocio otofasciatus
 Thorichthys meeki
 Thorichthys sp "Mixteco Gold"

Kenny Valentine—8

Ancistrus sp.
 Ilyodon cortesae
 Labidochromis carealeus
 Metriaclima zebra gold - Kawanga
 Phalloceros caudomaculatus
 Pomocea sp.
 Procambarus marmoratus
 Xiphophorus helleri

Continued on page 9

Side by Side Planted Tank Substrate Experiment; Part One

By Mike Monje, photos by the author

There's a lot of material on internet, and in the hobby regarding substrates for the planted aquarium. There are also several new substrate products on the market specifically for planted aquariums. I've tried many planted tank substrate experiments over the years, some had good results, and others were disasters, all of these were a mix / layer your own style though. The newer substrates that have come onto the market are supposed to be as automatic as old fashioned gravel, with the added benefit of being plant friendly. After many weeks of preliminary research I initially settled on two ready set go substrates, Seachem's Red Flourite, and Eco-Complete Red. However, after a brief conversation with Jeff at Bluefish I decided to setup a third tank with Fluval's Plant Substratum.

I stripped down three 15 gallon long tanks that all sit side by side in my fishroom. I bleached the tanks, and let them air dry for a day. I added all three substrates to the individual tanks, without any pre-rinsing. I used a Frisbee sitting on the substrate to diffuse the water as the tanks were filled, with a python water change system.

I decided to make these low-tech tanks, a simple sponge filter, single tube florescent light strip, with glass tank lids. Being on the top shelf in my fishroom they will require no heater. I will plant these with low to mid-light level plants, and try to keep about the same bio-load in all three tanks. Each tank will have a center-piece of driftwood, and I'll try to balance the planting level.

Tank One; Red Eco-Complete substrate, I used the entire bag (18 lbs.) in this tank. There was very little clouding on initial filling of the tank.



Tank Two; Red Flourite, I used the entire bag (18 lbs.) in this tank. The water clouded so badly on initial filling, the tank literally looked like a red mud mess! After filling the tank only halfway I drained it back down, and started over. No luck, still a red muck mess, at the halfway point I drained it again, and started over. On the third attempt the water was clear enough that I could faintly make out the back corners of the tank. It was, however, still too cloudy/messy to work with. I setup a Magnum 250 on the tank, in an attempt to clear the water. I realize that I could be messing up my results by removing a fair amount of the nutrients in the substrate by doing all this. However, I justified it my results by assuming that no aquarists would leave a tank like this to

just settle, as there was so much debris clouding the water that anything done to the tank in the future would just cloud the tank again and again. After four hours the tank was clear enough to proceed.



Tank Three; Fluval's Plant Substratum, I used about ¾ of the bag, as this gave me the same depth substrate as the other two tanks. This tank had the least clouding on initial filling.



Initial thoughts and reviews regarding setup, initial planting, and tank stocking...

Personally, I like the look of the Red Eco-Complete the best out of all three of the substrates. It has a fairly consistent grain size, and some nice black interspersed with the red. The granules are nicely rounded; this leads to a very pleasing appearance, and really looks good with the driftwood. I'm a little concerned that the small grain size may compact over time, and clouds the water a little when disturbed.

Seachem's Red Flourite, once the tank settled down really looks good, like tiny pieces of slate all intermixed with each other. The color is very uniform; the grain size varies within a small range that actually makes it very appealing to the eye. The red coloration is a lighter shade than the Eco-Complete, my second favorite for overall look in the tank. I'm a little worried about the jagged edges on this substrate, these could be tough on a bottom dwelling species like catfish or gobies. In response to this I added a colony of *Aspidoras cf. albater* to this tank. I will monitor the barbel's on these cat's to see if there's any ill effect caused by this fractured substrate. In addition to my concerns about the jagged edges on the substrate, this substrate releases quite a cloud into the tank every time the substrate is disturbed.

Continued on page 14

2012 HAP Totals

Roger Miller—49

Vegetative

Anubias coffeefolia
 Cryptocoryne usteriana
 Cryptocoryne walkeri
 Echinodorus sp. "Red Flame"
 Echinodorus amazonicus
 Echinodorus bleheri
 Eleocharis acicularis
 Hydrotriche hottoniiflora
 Lindernia rotundifolia
 Lobelia cardinalis
 Microsorium pteropus
 Rotella nanjenshan
 Vesicularia dubyana
 Althernanthera reineckii
 Bacopa monnieri
 Egeria Najas
 Glossostigma elatinoides
 Limnobium laevigaterr
 Lilaeopsis mauritiana
 Ricca fluitans
 Cabomba caroliniana
 Cabomba furcata
 Eichhornia crassipes
 Ludwigia arcuata
 Ludwigia palustris
 Myrophyllum tuberculatum
 Rotal sp. 'vietnam'
 Rotala Macrandra
 Polygonum kawagoeanum
 "makino"
 Nyphaea sp. "taiwan"
 Hygrophila corymbosa
 Heteranthera zosterifolia
 Helanthium bolivianum
 Vallisneria nana
 Ammannia gracilis
 Mayaca fluviatilis
 Eleocharis montevidensis
 Echinodorus angustifolia
 Rotala rotundifolia
 Helanthium tenellus
 Potamogeton gayi
 Didiplis diandra
 Pogostemon erectus
 Vallisneria americana var.
 "biwaensis"
 Vallisneria spiralis

Flowering

Eichhornia crassipes
 Echinodorus quadricostatus
 var. xinguensis
 Lindernia rotundifolia
 Aponogeton Longiplumlosus

Mike Monje—23

Vegetative

Ceratophyllum demersum

Cryptocoryne wendtii green
 Cryptocoryne pontederiifolia
 Cryptocoryne Spiralis
 Hygrophillia sp. Low Grow
 Lemna minor
 Ludwigia repens
 Microsorium pteropus
 Najas guadalupensis
 Nymphaea odorata
 Pistia stratiotes
 Ricca fluitans
 Sagittaria subulata
 Vesicularia dubyana
 Vesicularia montagnei
 Vallisneria nana
 Hygrophila difformis
 Thalia dealbata
 Anubias Barteri
 Cryptocoryne balansae

Flowering

Nymphaea odorata
 Nymphaea var. Blue Aster
 Thalia dealbata

Kory Voodre—13

Vegetative

Anubias coffeefolia
 Anubias nana
 Ludwigia repens
 Microsorium pteropus
 Vallisneria Americana
 Anubias Barteri
 Anubias Barteri
 Ceratophyllum demersum
 Hygrophila corymbosa
 Hygrophila polysperma
 Rotala indica
 Taxiphyllum barteri
 Vallisneria nana

Andrew Kalafut—10

Vegetative

Cryptocoryne balansae
 Cryptocoryne parva
 Cryptocoryne wendtii bronze
 Hygrophila difformis
 Ludwigia repens
 Bolbitis heudelotii
 Cryptocoryne walkeri
 Rotala sp. 'Nanjenshan'
 Staurogyne sp. 'low grow'
 Sagittaria subulata

Steve Hosteter—6

Vegetative

Anubias coffeefolia
 Cryptocoryne balansae
 Echinodorus Osiris
 Pista Stratiotes

Flowering

Pontederia cordata
 Eichhornia crassipes

Ben VanDinther—5

Vegetative

Cryptocoryne albida
 Cryptocoryne blassii
 Echinodorus quadricostatus
 Rotalla sp. "Magenta"
 Rotalla sp. "Viet Nam"

David Druszecki—4

Vegetative

Vallisneria spiralis
 Vallisneria nana
 Vesicularia Dubyana
 Hygrophila polysperma

Patrick Miller—3

Vegetative

Nelumbo nucifera
 Cryptocoryne balansae
 Cryptocoryne moehlmannii

Phil Wurm—3

Vegetative

Echinodorus amazonicus
 Sagittaria Subulata

Flowering

Nymphaea sp. Denver Delight

Justin Sarns—1

Vegetative

Nymphaeoides sp. Taiwan

Nicolas Johnson—1

Vegetative

Riccia fluitans

Melissa Dehaan—1

Vegetative

Echinodorus sp. red flame

Ken Zeedyk—1

Vegetative

Bolbitis heudelotii

Kim Oge—1

Flowering

Aponogeton madagasariensis

Tom Siegfried—1

Vegetative

Anubias Coffeefolia



Bristle Nose Pleco Grow Out Contest

By: David & Trisha Gruszecki

When this grow out contest came up, we thought it would be good to participate and at the same time gain some needed algae eaters. The first major decision we had to make when we got home was which tank was the best option. We decided on our 55 gallon tank that had our 15 young Angel Fish growing out in it.

There was quite a bit of algae on the aquarium when we added the Bristle Nose Plecos, and they went right to work on cleaning that up along with the extra food that the Angel Fish did not eat. There was not really anything special that we did for the Bristle Nose Plecos that we do not already do for all of our fish.

The items or "magic formula" for growing Bristle Nose Plecos are: an aquarium that already has some algae, weekly water changes of 50%, and a variety of different foods for them to eat. The feeding routine that we used is:

- *Almost Natural Tropical Fish Food daily in the morning
- *Spirulina disc (Algae wafers) daily in the evening, after the lights were out for the day
- *Grindle worms and Banana worms alternately several times a week
- *Repashy shrimp soufflé was added to the tank three times a week

Other than the water changes and feeding them a variety of different foods, we did not really do anything special.

I was excited when David came home and told me that we had won the grow out contest for the Bristle Nose Plecos. After the contest ended, we placed them in a tank with our Black Neon Tetras, another 55 gallon aquarium with an algae issue; the Plecos have doubled almost tripled in size since.

We really enjoy the grow out contests, as they give us a chance to work with different types of fish that are not the normal types of fish that we own. Obviously, we have had many Bristle Nose Plecos before the contest. The grow out contests also gives everyone a chance to compare the different grow out methods that they had used with what others used. We look forward to many more grow out contests.

BAP Continued

Travis Henkaline—7

Amatitlania sp.
Honduran Red point
Hemichromis bimaculatus
Neocaridina denticulata sinensis
Neolamprologus multifasciatus
Poecilia wingei
Skiffia lermiae
Xiphophorus maculatus

Dan Kraker—6

Albino tropheops macrophthalmus
Copadichromis borleyi
Metriaclima zebra gold - Kawanga
Paralabidochromis chronogynos piebald
Placidochromis "Jalo Reef"
Pundamilia nyererei - Mwanza

David Gruszecki—6

Clea helena
Labidochromis carealeus
Neocardinia heteropoda
Pseudotropheus aurora
Xenophallus umbratilis
Xiphophorus maculatus

Tim Monje—4

Magaritus
Neoheterandria elegans
Poecilia wingei
Pociliopsis gracilis

Scott Tetzlaff—4

Amphilophus Amarillo
Hemichromis guttatus
Phallichthys fairweatheri
Ptychochromis oligacanthus

Kory Voodre—4

Ancistrus sp.
Poecilia reticulata
Xiphophorus helleri
Herichthys cyanoguttatus

Tyler Mays—3

Aulonocara baenschii
Haplochromis sp. "dayglow"
Metriaclima estherae

Steve Hosteter—2

Mbipia lutea spotbar yala swamp
Neolamprologus multifasciatus

Kim Oge—2

Poecilia wingei
Xiphophorus maculatus

Phil Wurm—2

Gambusia affinis affinis
Limia vattata

Nicolas Johnson—1

Xiphophorus evelynae

Andrew Kalafut—1

Melanotaenia boesemani

Ben VanDinther—1

Nematobrycon palmeri

BAP Totals

# of Participants	22
# of Spawns	188
# of Species	132

Cory Voodre submitted this nice photo of one of his tanks.



My Experience with Lamprologus Callipterus

By Chris Carpenter, photo by the author

Lamprologus Callipterus is a harem breeding, shell dwelling Cichlid from Lake Tanganyika. Males attain a length of approximately 6" females 2.5". Visually a massive difference in size. Their body shape is elongated. They are grey with brown mottling in color with a blue fluorescent line under the eye, a trait common in many Tanganyika cichlids. They eat anything offered with ferocity.

My first glimpse of this fish came a few years ago while I was watching a National Geographic movie titled "Lake Tanganyika, Jewel of the Rift". I had never heard of L. Callipterus but I was keeping many shell dwelling cichlids at that time. I recall watching the movie and thinking this fish was cruel. The males would steal shells from one another. Females only enter shells when breeding. If there was a female with a brood in the shell the male had just stolen he would flick sand furiously with his tail on top of that shell to force the female to leave or stay and get buried alive. The female would exit the shell leaving behind her brood to die or be eaten. I thought I would never want to own that kind of fish.



Fast forward a year and a half and I just had to have these fish. I started searching the internet and low and behold, I found them. There was a shop I had been to once before selling them. The shop was in Toledo Ohio. I have made longer trips for fish. The trip had to be made! I found a babysitter and my wife and I departed that Saturday morning headed for Trilby Tropicals. A nice shop with a large selection of fish and fair prices. When we arrived 2.5 hours later I headed straight to the counter to ask what tank the L. Callipterus were in. I was shown and picked out 4 that I wanted; 1 large and 3 small.

I got home that evening and put my new prizes into a 20 long with Caribsea cichlid sand, it annoyed me that the sand had Malaysian Trumpet Snails in it, but as I soon found out, the Callipterus would take care of that. They must suck the snails out of the shells. Something I have never witnessed but I know it is

happening due to the abundance of empty shells in the tank. I scattered many types of medium sized shells all over the tank, including "Neothauma Tanganyicense" a very rare shell that comes from Lake Tanganyika. Then I let them settle in. I watched their tank daily. It appeared as though everybody was getting along very well and that I had chosen wisely. I had 1 male and 3 females. As time passed I noticed the shells that I spread all over the tank were now all being piled on the right side of the tank. The aquascaper in me was very annoyed by this, but I knew better than to move them.

One month later the fish were settled in nicely. While looking at the tank one night I could not find one of the females. I was bummed out and chalked another one up to mysterious fish disappearance. The next night another female was missing. AHH! What was going on? I sat in front of the tank for a while to observe and that is when I caught the slightest glimpse of a tail moving inside one of the shells. The next night the third female was missing. I was not worried, I was excited! Approximately 8 days later I noticed the tank that once had flat level sand was now cratered. Every corner had been completely dug out exposing the glass. Still no sign of the females. Two days later the first female emerged with 20 to 30 fry. One day later the second female came out with her fry and on the third day, out came the last female with her brood. They had tons of fry and they were keeping them in the corners of the tank that I assume the male had dug out in preparation.

I decided to see if L. Callipterus was similar to their fellow shell dwelling cichlids in that they would protect and coexist with their fry for an extended period of time. They did, for 5 days. All the fry had vanished. I was not pleased! I knew I had breeders and that in time they would breed again. They did, about one month later. I noticed another very interesting behavior. The male would shake his head and body forcefully whenever a female came by. I then saw exactly what he was doing. He was motioning to a shell as if to tell the female "here, this one, get in, it's time to breed".

This time around I had the same amount of fry and removed 30 to 40 fry. Not an easy task. The fry are very small and hit the dirt when frightened. I tried siphoning them out with no luck. I resorted to putting in a net and coaxing them into it or a nearby shell which I could remove and flush the fry out. I lost all of those fry due to larger fry of another species eating them, I think. The third time around I removed 30 to 40 fry of which I still have 7 left. I have my suspicions that the larger Callipterus fry take out the weaker ones. I have since had a forth brood and again have removed about 30 fry. This time I have given them a larger tank with more hiding spots.

Lamprologus Callipterus is one of the most interesting fish I have ever kept. I am observing new behaviors all the time. I find all of the shell dwellers to be very interesting and this might just be the most. I hope to BAP L. Callipterus in 2013 and give another club member the chance to be as intrigued as I am.

2012 GVAC Awards

2012 was a record breaking year for GVAC due to the number of people who participated in the BAP & HAP programs. With 22 people turning in BAP spawns in and 15 people participating in the HAP program GVAC members were very busy. All of this activity has lead to hard won victories for the club contests and many new individual award levels. Below is a list of the club awards and individual awards earned this last year.

Aquarist of the Year



Patrick Miller has been chosen by the GVAC President as the recipient of the 2012 Aquarist of the Year award. This award is handed out to the individual that the President would like to recognize for contributions to the success of the club. In 2012, Patrick served on the Board of Directors in the position of Recording Secretary and helped set the course for the club. Patrick was nominated for and elected to the position of GVAC Fellow in 2012. He also served as Newsletter Editor, Awards Chair, Swap Meet Chair, Club Liaison and has been instrumental in reviving the bowl shows and grow out contests for club members. Patrick attended every meeting and major event the club put on in 2012, and participated in them all, including giving a presentation at a monthly meeting. He served as back up to the HAP chair and hosted the 2012 Summer Picnic, and introduced the club to the Buy It Now Table at the large auctions. GVAC would not be the same club without him, and in appreciation for his efforts, he is named the 2012 Aquarist of the Year. - Ken Zeedyk

Breeder of the Year

Mike Monje. After spawning 33 fish last year Mike kept up the pace and spawned another 27 fish this year. Mike will breed just about any fish and that shows with the wide variety of fish that he turned in this year. These fish included; Cichlids, Livebearers and Rainbowfish. It will be interesting to see what he does in 2013.

BAP Rookie of the Year

Justin Sarns. For a rookie Justin sure did a good impression of being an experienced breeder. With 22 species turned in he was only 5 short from winning both rookie and breeder of the year. Furthermore, almost all of Justin's spawns were Cichlids. It will also be interesting to see what he does in 2013.

Horticulturalist of the Year Roger Miller. Roger turned in an amazing number of both vegetative and flowering plants to earn the Horticulturalist of the Year. This summer Roger had an open house for those who wanted to make the drive to White Cloud to see his set up. If you have a chance to "tour" his tanks don't miss it. You will understand how he is able to propagate so many plants in one year.

HAP Rookie of the Year Mike Monje. Mike decided that in addition to participating in the BAP program he would give his green thumb a try as well. The results were impressive. Mike turned in both vegetative and flowering propagations.

Writers Contest

Mike Monje. When you turn in a bunch of spawns and lots of plants for the HAP program you need to do a lot of writing, picture taking or programs. Fortunately for the club Mike was a prolific writer. He also had one of his articles picked up and published by another club.

In addition to the competitive awards listed above, GVAC has other personal award levels that members can obtain to mark milestones in their hobby and encourage participation in club programs. Each of the following awards below were earned during 2012.

Expert Breeder Level Requires the member to spawn 50 different species in the BAP program.

Mike Monje

Master Breeder Level I Requires the member to spawn 100 different species in the BAP program.

Patrick Miller

Ken Zeedyk

Horticulturist Requires a total of 30 propagations with at least 5 flowering propagations.

Roger Miller

Master Horticulturist Requires a total of 50 propagations with at least 10 flowering and 1 sexual propagation.

Roger Miller

BAP Tags

Ken Zeedyk	100 & 110 spawns
Patrick Miller	100 & 110 spawns
Mike Monje	40, 50 & 60 spawns
Roger Miller	30 & 40 spawns
Dan Kraker	30 spawns
Tom Siegfried	30 spawns
Chris Carpenter	20 & 30 spawns
Justin Sarns	10 & 20 spawns
Travis Henkaline	10 spawns

HAP Tags

Ben VanDinther	130 vegetative propagations
Roger Miller	20, 30, 40 & 50 vegetative propagations 10 flowering
Andrew Kalafut	10 vegetative propagations
Mike Monje	10 vegetative propagations
Tom Siegfried	10 vegetative propagations
Kory Voodre	10 vegetative propagations
Ken Zeedyk	10 vegetative propagations

HAP: Invasive or Protected? Part 1 Invasive

By Patrick Miller photo by the author

GVAC has a very healthy and growing number of participants in the HAP program. There is good reason for this as there are many nice plants on the market and they add a lot to any aquascape, but be aware there are a number of species that are of special concern.

In Michigan, we are lucky; most of the true aquatic plants that are available for the aquarium trade are tropical in nature and could not survive our cold winters. However, there are some plants that are available for the aquarium trade that are considered invasive, some of these are restricted or outright prohibited here in Michigan. There are also some plants that are native to Michigan, seem like they would be great in an aquarium, but are protected and should not be removed and put into our tanks or outdoor ponds. This can be confusing, especially if you do not know where to look to find answers as to which plants fall into which categories.

As good stewards of the hobby, we need to make sure that we know what plants we can keep and what plants we can't keep. This article is to help provide some resources for our club members so we can make sure that we practice our hobby in responsible manner.

First, let's go over plants that are invasive, prohibited or restricted. Michigan publishes a field guide of these plants that also be found online. The rather long title "A Field Guide to Invasive Plants of Aquatic and Wetland Habitats for Michigan" can be found by doing a Google search or by going to the website <http://mnfi.anr.msu.edu/invasive-species/aquaticsfeldguide.pdf>. Unfortunately, there is not a short and easy web address.

Some of these plants will never find their way into our aquariums. Plants such as *Arundo donax* (Giant reed) or *Typha angustifolia* (Narrow-leaved cat-tail) are just not suited to our tropical aquariums or small garden ponds. However, a surprisingly large number might or already have.

This field guide lists many different plants. Some of these plants are listed due to the threat of becoming established. These plants are not restricted or prohibited and may be kept by hobbyists. However, they should be treated with care so they do not become established. Plants like *Hygrophila polysperma*, *Iris pseudacorus* (Yellow Iris), *Lysimachia nummularia* (moneywort), and *Trapa natans* (Water chestnut) are listed as invasive species. As mentioned, they are not prohibited or restricted for individuals to have but care should be taken that they do not end up in our local waters. Some of these species have not been found in Michigan but some have. If you find these, or any of the others listed, you should contact the DNR so that they can record the occurrence and take action if appropriate.

Other plants listed in this guide are restricted or prohibited outright.

Cabomba caroliniana, what long time aquarist hasn't had this in their tanks at one time or another. I know I had it at one time, I even got it to flower. After learning that it is restricted I removed it from my tanks.

Egeria densa, another old standard aquarium plant, that can sometimes still be found in aquarium stores in Michigan and is often found in aquarium stores outside of Michigan or online.

Try *Elodea canadensis*, it looks the same and does great in tanks.

Hydrilla verticillata can also be found in the hobby but hasn't made it to GVAC. It might be tempting to acquire but please avoid.

Potamogeton crispus is also known as curly pondweed. I have found this in many local lakes and streams. It looks like a plant that might be perfect in an aquarium but please don't try it.

Hydrocharis morsus-ranae otherwise known as European Frogbit. Frogbit is a cool plant but please stick to the Amazon Frogbit *limnobium laevigatum* so as not to risk hurting our native environment.

Myriophyllum spicatum or Eurasian Watermilfoil. This plant is a very tempting plant to try in a tank. It has fine feather like leaves and has a very pleasing appearance. However, it is very aggressive and is extremely destructive to our local lake's ecosystems. Please avoid this plant.

Myriophyllum aquaticum is also known as Parrot Feather. Once again this plant looks like it might be perfect for a tank or small pond but the possibility that it could become established in Michigan means that you should avoid trying it in your tanks.

There are many more plants that are listed in this guide. If you look through your tanks and find any of them please dispose of them in a manner that will keep them from getting into our local environment.

No restricted or prohibited plants will be accepted for the HAP program and they will be removed from all auctions. Please know what is restricted before trying to propagate it.

In part two, I will talk about plants that are protected and should not be removed from the environment.



Well established curly pondweed in Cascade Creek just South of the Burton & Cascade RD intersection.

Grow Out Contest 2012

2012 saw a return of the grow out contest to GVAC. This was a test to see how much interest there was in this type of a contest. For those that do not know what a grow out contest is, here is a brief overview.

The grow out contest starts with someone bringing in bags of fry. Each bag usually contains between 4-10 fry all of the same species and 5-10 bags are usually supplied. The bags are sold to people who would like to participate. Those people take the fish home and spend 3 months growing the fish to see how large they can get them. At the end of the 3 months people bring in their fish to be judged and see who did the best job growing out their fish. This can be for bragging rights or as we did this last year, the winner of each round received 25 auction dollars to be used at a club auction. That is after they wrote an article about their experience for the newsletter.

Since there were 4 rounds of the grow out contest this year we also awarded points for 1st, 2nd & 3rd place so that we could award an overall winner.

The points breakdown for the year is as follows;

Chris Carpenter	24 points
David Guszecki	14 points
Kenny Valentine	11 points
John Lane	10 points
Ken Zeedyk	10 points
Kory Voodre	7 points
Phil Wurm	4 points
Patrick Miller	4 points

If you liked the program in 2012 and would like to see it return in 2013 please see the board about being the grow out chairman. The responsibilities of the chairman are to find fry suitable to be used in the contest and ensure that the seller brings them to the correct meeting. Keep a list of those people participating in the contest and let them know when it is time to bring the fish in for judging. Find an impartial member(s) of the club to judge the fish. Lastly, when an article is written for the newsletter make sure that the winner is awarded their \$25 auction cash.

Congratulations and thank you to everyone who participated in the program.

Pogostemon erectus Green Hindi Willow

By Roger Miller photo by the author

Pogostemon erectus is a stem plant, that was originally collected for the aquarium hobby, from the Western Indian state of Maharashtra.* Originally presented as *Rotala verticillaris* it has since been identified as a *Pogostemon* species and not a *rotala*. If provided with adequate lighting (the stronger the light the more compact the plant will stay) and CO2 it is a fairly undemanding (relatively speaking) plant.

I had to qualify undemanding with relatively speaking as this is

my second attempt with this species. The first attempt, obviously, not turning out so well.

This plant is normally purchased as a potted plant as the stems will develop a fairly vigorous root system. My little pot of plants was purchased locally at an aquarium & pet store in August of 2012. The plants were divided evenly between two separate tanks and placed in approximately the same locations in each tank. One tank uses straight tap water which is maintained at 74 – 76 degrees F and the other uses a mix of tap (1/3rd) and R.O. (2/3rd) which is maintained at 82 – 84 degrees F. Water changes are usually performed on a biweekly basis, more often if the mood strikes me. Both have flourite black sand for substrate, use fluval 204/205 canister filters for filtration, are supplemented with CO2 (6 ½ hrs. daily) and are dosed with flourish and flourish iron additives weekly per manufacturers directions. The tap water tank has a twin tube T5HO light fixture (6700K), while the mixed water tank has a Marineland LED planted tank light fixture (6500K), lighting is provided for 10 ½ hours daily.

After about 8 weeks the group of plants in the mixed water tank had grown about 50% larger, in both height and diameter, than the ones in the other tank. This was not done intentionally as test to see how growth rate can be affected by different water parameters, I just like to divide the plants I purchase between two or more tanks to increase my chances of success. It is, however, interesting to note how just one or two small differences can affect plant growth in a very dramatic way.

Vegetative reproduction is accomplished by cuttings, with the remaining base stem forming side shoots after trimming. *Pogostemon erectus* will thus form compact groups of bright green, conifer-like (think pine tree) stems.

This is a really cool looking stem plant that can be

easily maintained as an attractive group or “bush” type plant, with minimal effort, as it is not as fast growing as many stem plants which require constant pruning and replanting.

This one is a keeper



Pogostemon erectus

* location information from aquatic- plantcentral.com

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 has membership cards this year. This is the first time that our club has done something like this and there is a benefit to having them.

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

Continued from page 7

The Fluval Plant Substratum was by far the easiest to setup, and went the farthest of the three; I could setup a 15 long and a 10 standard with one bag of the substrate. It was the most expensive of the three; this was offset by being able to setup a bonus tank. So, realistically the costs were within a few dollars of each other. Fluval Plant Substratum is a very light substrate; this can make planting it a little frustrating. I needed to use lead plant weights in some instances to keep the plants in the substrate. This is also a man-made substrate, not a blended organic substrate as the other two are. Being a man-made substrate leads to a uniform granule size, a little too uniform for my taste. The color, a light grey, is very pleasing to the eye and contrasts nicely with the driftwood. By far the most stable of the three, at least in these early stages.

Part two of this article will compare the first 6 to 9 months of plant growth between these three substrates, compacting of the substrates, and any other oddities that arise during the course of this experiment.