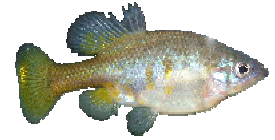




GVAC Tank Notes



July—September 2012

Issue 57

Upcoming Meetings:

July 14	Picnic Members only
August 11	Pat Hartman Showing fish/ Judging fish
September 8	Chris Newell Crypts

GVAC AWARDED 2013 ALA Convention!

Inside this issue:

Presidents Message	3
Calendar	4
What is it?	4
BAP	5
Limia melanogaster	6
ALA Convention	6
The Easiest Fish	7
Limia Species, "Tiger"	7
HAP	8
Lobelia cardinalis	9
Grow out contest	10
Big Dog Shop Hop VI	10



July 14 Picnic

This years' picnic will be at Patrick Miller's house (address page 4) from 11am to 3pm. This member's only event is a great way to sneak a peek into Patrick's basement fishroom, his summer tubs & pond and of course to talk fish.

As usual, GVAC will provide soda/water and a main course like hamburgers & hotdogs or fried chicken. Members should bring a side dish or dessert to pass and any adult drinks they wish to consume. We will also be doing a bring a fish get a fish exchange so make sure you bag up something to participate.

Please RSVP to Patrick so we can get a count for the food.

2012 Board of Directors

President	Ken Zeedyk	616-772-4634	zekeshouse@wmol.com
Vice President	Ben VanDinther		aquariumservices@sbcglobal.net
Treasurer	Roger Miller		miller.rogerl@att.net
Recording Secretary	Patrick Miller	616-336-5437	pmlife4@att.net
Corresponding Secretary	Jim Dutcher		jdutcher@khps.com
Sergeant-at-Arms	Mike Monje		extreamaquatix@gmail.com
Members at Large	Tom Siegfried		tomsiegfried@charter.net
	Pat Hartman		phat711@sbcglobal.net
	Chris Carpenter		christojanet@hotmail.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	Jim Dutcher		jimdutcher@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

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

Welcome to the summer issue of GVAC Tank Notes. I hope you are enjoying the ever changing Michigan temperatures. Seems one day it's over 90 degrees out, and the next it is barely over 60. You know you're in Michigan when your heater and air conditioner run on the same day.

For certain species of fish these temperature swings can be detrimental, but to others it can trigger courtship and spawning activities. My Cory cats have been quite prolific this year and I managed to spawn another loach species in part by manipulating temperatures, so living with Michigan's ever changing climate does have some perks. In addition to temperature fluctuations I have found my native fish are responding to the photoperiod, or length of daylight. I over wintered a number of species downstairs in my house where they are exposed to some natural sunlight coming in through the windows. The temperature didn't vary as dramatically as it would have out in nature and even when I did try to trigger them by manipulating temps I think they still spawned more to the time of year than anything. My Rainbow Darters spawned in March and my Iowa Darters in June similar to how they would have in nature. During this time the temperature in their aquarium had remained relatively constant. I'll have to experiment some more with photoperiod next year.

Summer is a great time to get outdoors and collect and observe native species. There are a whole lot of fish out there that most people don't know about and that are just as interesting as the tropical species we hobbyists usually keep. You can even jump in with a mask and snorkel and observe them in their natural environment. Snorkeling in a river can be both educational and refreshing in the summertime. From time to time we'll put together a collecting trip around West Michigan so the next time

we do come on out and learn about your native Michigan fish. Just make sure you pack a jacket along with your swimsuit when you head out. After all this is Michigan.....

Happy fishkeeping,

Ken Zeedyk



Ken Zeedyk's photo showing a fry from his spawning of the peppered loach.

Please support those who support GVAC

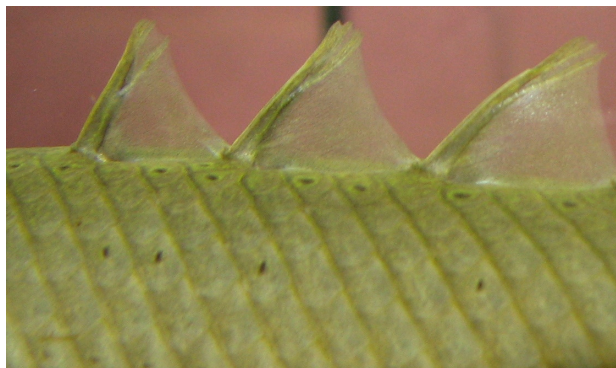
Blue fish Aquarium
 Preuss Pets
 Amazonas Magazine
 Aquatic Gardeners Ass. - Karen Randall
 Aquadine
 Boyd Enterprises
 Cichlid Press
 CichlidBreeding.com
 Doctors Foster & Smith
 Florida Aquatic Nurseries
 Hagen
 HBH Pet Products
 Hikari USA
 Kordon—Novalek
 Marineland

Oddballfish.com
 Ocean Star International
 Penn Plax
 Ocean Nutrition
 Pet Supplies Plus
 Pet Connection
 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

July 11-15	ACA Convention Indianapolis IN www.cichlid.org
July 11	Angel Fish Show www.aca2012indy.com/wordpress/
July 14	GVAC Summer Picnic 11am to 3pm Location: Patrick Miller's House 410 College AVE SE, GR MI 49503 616-336-5437 Members only
August 11	GVAC Meeting Topic: Pat Hartman, showing fish
September 8	GVAC Meeting Topic: Chris Newell, Crypts
October 13	GVAC Meeting Topic: TBA
October 13-14	SWMAS Speaker & Auction Krum Center 629 East Clay St. Schoolcraft, MI Registration @ 9:30—Auction @ 11am www.swmas.org
October 20	GDAS Fall Auction Good Shepherd Church 814 Campbell RD Royal Oak MI 48067 www.greaterdetroitaquariumsociety.org
October 27	GVAC Fall Auction Home School Building Registration 9am—Auction starts at 11am
November 3	Michigan Cichlid Association Fall Auction 33845 24 Mile RD Chesterfield TWP MI 48047 www.michigan.cichlid.freesevers.com
November 10	GVAC Meeting Topic: TBA
November 16-18	OCA Extravaganza Holiday Inn, Strongsville OH www.ohiocichlid.com/Extravaganza.html
December 8	GVAC Holiday Party Awards presentation Location to be announced Members Only
December 8	MCAS Fall Auction 876 Horace Brown DR. Madison Heights MI Registration @ 9am—Auction @ 10:30am www.motorcityaquariumsociety.com

What is it?



This photo of a fish part was submitted by a GVAC member. The goal is to try to identify which species is in the photo. If you think you know please contact the newsletter editor Patrick Miller with your answer. Answers are due by the next issue of the newsletter which is to be published in at the beginning of October.

If you have something like this that you would like to see GVAC include in the newsletter please contact the editor or a member of the board with your idea. Happy fishkeeping.

Writers Contest update

GVAC has a writers contest to help encourage members to disseminate their knowledge to fellow hobbyists by writing articles for our newsletter. For the last few years we have had great participation from GVAC members writing articles for this newsletter.

Mid year standings for this contest are;

Mike Monje	10 points
Had one article reprinted by another club for 2 points	
Roger Miller	6 points
Chris Carpenter	4 points
Chase Kilinsteker	4 points
Patrick Miller	3 points
Tyler Mays	2 points
Ken Zeedyk	2 points

That is a lot of articles written by club members which makes this a much better and more interesting publication to read.

As a reminder to everyone participating in the BAP program you need to submit one article, a photo or give a presentation at a monthly meeting for every 10 spawns to receive any tags, reach a breeder level or win BAP or rookie BAP of the year awards.

The HAP program has similar requirements.

Thank you to everyone that has participated in the newsletter by submitting an article or photo. If you haven't please think about giving it a try.

2012 BAP Through July

Ken Zeedyk—16

Bedotia gaeyi
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

Mike Monje—14

Bedotia gaeyi
Caridinia babaulti sp. Green
Girardinichthys multiradiatus
Girardinus microdactylus
Girardinus rivasi
Girardinus var. "yellow belly"
Iodotropheus sprengerae
Melantaenia lacustris
Metriaclima greshakei
Poeciliopsis prolifica
Pseudotropheus elongatus
"che were"
Skiffia sp. V188
Skiffia lermiae
Xiphophorus variatus
La Minitzia Mx

Patrick Miller—12

Aspidoras cf. albater
Badis cf. siamensis
Corydoras venezuelanus
Corydoras paleatus
Girardinus falcatus
Girardinus rivasi
Girardinus unnotatus
Limia tridens
Limia zonata
Oryzias woworae
Phalloceros caudomaculatus
Poecilia butleri

Roger Miller—11

Amatillania nigrofasciatus
Astatotilapia latifasciata
Caridina cf. cantonensis "zebra"
Clea Helena
Corydoras sp. CW010
Iodotropheus sprengerae
Neolamprologus multifasciatus
Pseudomugil furcatus

Pseudotropheus demasoni

Skiffia lermiae
Skiffia multipunctata

Justin Sarns—11

Astatotilapia latifasciata
Aulonocara "Dragon's Blood"
Aulonocara stuartgranti Hai reef
Haplochromis sp. 35 tomato
Haplochromis "Xystichromis"
sp. "Kyoga flameback"
Labidochromis carealeus
Mbipia lutea spotbar
Neocaridina denticulata sinensis
Neolamprologus multifasciatus
Pundamilia nyererei sp
"Crimson Tide"
Pundimillia nyererei

Chris Carpenter—10

Aulonocara jacobfreibergi
Geophagus steindachneri
Chlamydogobius eremius
Labidochromis carealeus
Lamprologus melaegris
Lamprologus ornatipinnis
Lepidiolamprologus hecqui
Lepidiolamprologus hecqui
Macropodus opercularis
Xiphophorus maculatus

Kenny Valentine—7

Ancistrus sp.
Ilyodon cortesae
Labidochromis carealeus
Phalloceros caudomaculatus
Pomacea sp.
Procambarus marmorkrebs
Xiphophorus helleri

Tom Siegfried—6

Ancistrus sp.
Hemichromis bimaculatus
Pomacea bridgesii
Procambarus fallax f. virginalis
Pseudotropheus saulosi
Xenophallus umbratilis

Dan Kraker—4

Copadichromis borleyi
Metriaclima zebra gold - Kawanga
Placidochromis "Jalo Reef"
Pundamilia nyererei - Mwanza

Tim Monje—4

Magaritatus
Neoheterandria elegans
Poecilia wingei
Pociliopsis gracilis

Scott Tetzlaff—4

Amphilophus Amarillo
Hemichromis guttatus
Phallichthys fairweatheri
Ptychochromis oligacanthus

Travis Henkalin—3

Hemichromis bimaculatus
Neocaridina denticulata sinensis
Poecilia wingei

Jeff VandderBerg—3

Labidochromis gigas
Limia tridens
Protomelas spilonotus

Kory Voodre—3

Ancistrus sp.
Poecilia reticulata
Xiphophorus helleri

David Gruszecki—

Labidochromis carealeus
Pseudotropheus aurora

Tyler Mays—2

Aulonocara baenschii
Metriaclima estherae

Nicolas Johnson—1

Xiphophorus evelynae

Steve Hosteter—1

Neolamprologus multifasciatus

Ben VanDinther—1

Nematobrycon palmeri

Mid Year Totals

Number of participants:	19
Number of spawns:	115
Number of unique species:	90

With 4 more months and one fall auction to go for this years BAP program we are on pace to set a record for participants and spawns. Also as a reminder, by September 12 you need to have your fry hatched or born to be eligible to turn at the November meeting. Good luck and happy fish breeding.

Limia melanogaster; A Profile

By Mike Monje

Overview

Limia melanogaster the “The Jamaican Limia” or “The Black Bellied Limia” are not necessarily a very colorful fish, females top out at around 1 3/4” SL and males at about 1” SL. I guess I should qualify that *most people don't find them to be a colorful fish*. However, I find them to be quite colorful, kind of in a subdued way. The larger females have a distinctive black belly, towards the rear of the fish, with a blue sheen to the body intermixed with white and black. The smaller males will be overall white and black with a yellow band along the tail, top to bottom. They will also have a black band between this crescent shape and both edges of the tail, most will have the blue sheen that the females display. The males do not have the huge black spot on their abdomen that the females do. The males are more colorful than the females; however, I like the female's coloration more with that black spot on their abdomen.

Habitat

Their native range is the streams and rivers throughout the island of Jamaica. I have personally observed these fish in the Martha Brae River, and in a small stream feeding into Dunn's River, an interesting note; I did not see these fish in Dunn's River perhaps the current is simply too strong. In these habitats *L. melanogaster* schooled very near the shore, out of heavy currents, and sought cover in the heavy vegetation found there. Their native coloration was very different from one another, as these habitats were also very different from one another. The Martha Brae has a distinctly Blue color to the river and a very sandy bottom, quite beautiful really, while the small tributary was a very clear / pebbly bottom and closely resembled the small trout streams that are scattered throughout Michigan. In addition to the variable water and bottom conditions of these two habitats, they are located on near opposite ends of the island from one another. The fish from the Martha Brae, (Blue water), were mostly black and white, the crescent in the tail was a very bright yellow, the fish from the Dunn's River Drainage had a lot of Blue sheen to the bodies! Overall, these fish were much more colorful than the lines I've seen in the hobby.

Care

Limia melanogaster offers no problems to the aquarist. This has proven to be quite a hardy and adaptable species, tolerant to wide variety of water conditions and temperatures. I have personally kept this species since April of 2010. I started with a Trio and four small fry that I obtained from the ALA auction at the close of the convention. I have moved my colony from a 20 long, to a 15 long, to a 40 breeder, and then back to a different 20 long. In all this time and all these moves I don't recall seeing any fatalities, and these tanks are quite variable in their water conditions and setups.

Feeding

The aquarist will find that feeding *Limia melanogaster* presents no problems at all. They greedily accept whatever food is offered. I've been feeding mine a rotating diet of Brine Shrimp Flake, Earthworm Flake, Frozen Glass Worms, and Spirulina Flake, all are accepted with the same vigor.

As a side note, while speaking with Dr. Alex Cruz of the University of Colorado, a noted *Limia* expert, he says all he feeds is spirulina and he keeps hundreds of tanks with most all of the known *Limia* species in his lab.

Breeding

This species again presents no problems or special requirements when it comes to breeding. Males will utilize a combination of strategies with the females, a nice shake and shimmy with a raised dorsal, or if that doesn't work they're not opposed to a sneak attack. The female will brood for 20 to 35 days depending on temperature and will generally drop 15 to 30 fry per brood. The parents don't really bother the fry, as long as there's some cover for the fry about 80% will survive. The fry grow very fast, again depending on temperature, and will start coloring up in about 4 weeks. Personally, I've always bred this species in a colony tank, with very few problems.

Conclusion

I highly recommend this species; perhaps I'm biased because I got to know them in their *home country*. This is the first species that I identified in their native habitat *before* I ever acquired them for my fishroom.

GVAC & The 2013 ALA Convention

GVAC will be hosting the 2013 American Livebearer Association Convention. This is a great opportunity for our club as 200 Livebearer enthusiasts will be coming to Grand Rapids for this event.

If you have not been to a national fish related convention this is your best opportunity to become hooked, I mean attend your first convention.

This convention starts on Thursday with early registration. On Friday things really get going with side trips, show setup, vendor room, an evening speaker, and a hospitality suit. Saturday will include speakers, show, banquet, awards presentation and much more. Sunday includes the biggest auction of livebearers you can imagine. And you can't forget one of the best activities of the weekend, Room Sales! Many attendees will be selling some of the best looking, and rare, livebearers in the hobby right from their rooms. This is a great way to get some great looking fish, not to mention new fish for you to breed for the BAP program.

There are a lot of opportunities for all of our club members to become involved with this event. From registering to attend and showing fish to volunteering to help with such things as registration, show setup/teardown, helping at the auction and much more.

Look for announcements on how you can help at upcoming meetings and announcements from Ken Zeedyk or Tim Boelema who is the 2013 Convention chair.

This is going to be a great event!

The Easiest Fish I have Ever Spawned: The White Cloud Mountain Minnow, *Tanichthys Albonubes*

By Ken Zeedyk

Having spawned over 100 species of fish, I can honestly say that the White Cloud has to be the easiest fish I have been able to breed and turn in for a BAP (Breeder Award Point). Even the infamous *Gambusia* livebearers and Convict cichlids took more time and effort than these guys. The spawning group was easy and inexpensive to obtain and required very little maintenance. The fry were hatched and raised with the parents, and were easily raised on prepared food. All things considered I wish I would have tried spawning them sooner, even before those infamous convicts.

Tanichthys albonubes is a small member of the Cyprinidae or carp and minnow family. They were originally discovered on White Cloud Mountain in China and are now feared to be extirpated from this location in the wild due to development. A number of relict populations have reportedly been found so they are not extinct in the wild, as I had often heard. The fish we typically see in the hobby are all captive bred, mainly on fish farms. They should be most comfortable between temps of 65 to 75 degrees and since they are farm raised they are quite tolerant of water parameters such as pH and hardness. As with many fish, White Clouds show their colors best in a planted aquarium and a school of 12 to 20 of them in a 10 gallon tank makes for a very nice display, especially when the males start displaying. Males and females are quite easy to tell apart. The males are more colorful and have a slimmer body profile, while the females are a bit larger and are more robust.

The White Clouds that bred for me were housed in a 5.5 gallon tank, on the bottom of a rack, with no heater, a sponge filter and a large bunch of Java Moss on the bottom of the tank for spawning. White Clouds are egg scatterers, so the idea was that they would spawn over or in the Java moss, and the eggs would hatch within the plants. I also had some hornwort floating in the tank for cover. They were fed dry flake and some live foods, including baby brine shrimp which they ate with gusto. Other than a daily feeding I basically placed them in the tank and left them alone. Within a week I noticed some very tiny fry in the tank. I had been informed by Jeff VanderBerg of Blue Fish Aquarium that the adults wouldn't eat the fry, so I left them in the tank. It appeared Jeff was correct because within two weeks I had a plethora of fry swimming in the tank along with the adults. I thought this was pretty great. As a bonus the fry were quite colorful and looked like little neon tetras swimming around. I continued feeding the adults baby brine, and fed the fry a commercially prepared fry food. They seemed to do quite well on it and grew rapidly. As the fry grew large enough, they too started eating the baby brine. I experienced no problems rearing the fry and didn't fuss over them much. Eventually I did pull out the adults and sold them at a GVAC auction. They were getting a bit too good at producing babies, and that was a lot of little mouths to feed.

If you are just starting out breeding your aquarium fish, or are in need of a confidence boost give the White Clouds a try. They are a good egg scatterer to start with, and what you learn by spawning these fish will help you later when you try spawning

tetras or barbs. I think Ben VanDinther's classic Convict Cichlid comment "If you can't breed these guys go out and buy a stereo" would also be well used in regards to the White Clouds. They have to be the easiest fish I have ever spawned.

Limia Species, "Tiger"

By Chase Klinesteker photo by the author

The Tiger Limia is a relatively new fish that was first imported from Lake Miragoane, Haiti in 1998. The lake is one of the largest freshwater lakes in the Caribbean and its water is fairly hard. Limia are closely related to mollies and this fish appeared to be very much like *Limia nigrofasciatus* but after close examination was found to be different. It has not been scientifically identified and has no Latin name yet, so for now is called Limia Species, "Tiger". It is a fairly attractive fish with 5-7 vertical stripes along the body from head to tail. There is a yellowish cast on the body and fins, especially in the male, as well as a metallic reflective sheen from the scales. Maximum size seems to be about 1 1/2 inches with the male slightly smaller.

They are good eaters and will consume most dry, frozen and live foods. I use a 50% mix of spirulina in the dry food to give them vegetable matter.

I have found them to be somewhat sensitive to large water changes and too much medication, possibly because they are not far removed from the wild. They don't do well if overcrowded and are somewhat shy, so plants, hiding places, and clean conditions are recommended. A species tank seems best, although this fish is quite peaceful and would likely do well in a community environment. Stable water conditions seem to be a key to keeping them happy.

They are not overly prolific, with from 5-20 fry per batch. One might want to isolate the female for better fry survival, as even with plants in a species tank, numbers grew slowly for me. The females do not get overly large before giving birth. The Tiger Limia has done best for me in a lower tank of my fishroom where the temperature ranges from 70-75 degrees.

I certainly would recommend one keep the Tiger Limia for its attractiveness, and that it presents a slight challenge to keep healthy and reproduce.



HAP January - July

Mike Monje

Vegetative

Ceratophyllum demersum
Cryptocoryne wendtii green
Cryptocoryne pontedericiifolia
Cryptocoryne Spiralis
Hygrophillia sp. Low Grow
Lemna minor
Ludwigia repens
Microsorium pteropus
Najas guadalupensis
Nymphaea odorata
Pistia stratiotes
Riccia fluitans
Sagittaria subulata
Vesicularia dubyana
Vesicularia montagnei
Vallisneria nana

Flowering

Nymphaea odorata

Roger Miller

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

Andrew Kalafut

Vegetative

Cryptocoryne balansae
Cryptocoryne parva
Cryptocoryne wendtii bronze
Hygrophila difformis
Ludwigia repens

Ben VanDinther

Vegetative

Cryptocoryne albida
Cryptocoryne blassii
Echinodorus quadracostata
Rotella sp. "Magenta"
Rotella sp. "Viet Nam"

Kory Voodre

Vegetative

Anubias coffeefolia
Anubias nana
Ludwigia repens

Microsorium pteropus

Vallisneria Americana

Steve Hosteter

Vegetative

Anubias coffeefolia
Cryptocoryne balansae
Echinodorus osiris

David Druszecki

Vegetative

Vallisneria spiralis
Vallisneria nana

Phil Wurm

Vegetative

Echinodorus amazonicus
Sagittaria Subulata

Justin Sarns

Vegetative

Nymphaeoides sp. Taiwan

Patrick Miller

Vegetative

Nelumbo nucifera

Nicolas Johnson

Vegetative

Riccia fluitans

Melissa Dehaan

Vegetative

Echinodorus sp. red flame

Ken Zeedyk

Vegetative

Bolbitis heudelotii

Mid Year Totals

Number of participants: 13

Number of plants: 58

Number of unique species: 45

Number of vegetative: 57

Number of flowering plants: 1

Number of sexual reproductions: 0

2012 is off to a good start in both numbers of propagations and number of participants. Summer is a great time to try to get some of your plants to flower by putting them outside in a tub, pond or, as with Crypts, emersed.

Lobelia cardinalis (Cardinal Flower)

By Roger Miller photo by the author

Lobelia cardinalis is a stem plant that is native to central and eastern North America. It is a marsh plant that can also be found growing along the banks of lakes and rivers. It is a slow-growing species that can reach over 3ft. in height. The flowers are a very decorative, bright red, hence the common name of Cardinal Flower, and for this reason it is often cultivated in gardens.

Coaxing this plant to grow submerged from the emersed form is not without difficulties. In the book **Aquarium plants, their identification, cultivation and ecology** by Dr Karel Rataj and Thomas J. Hoareman they state: "Emersed plants are propagated; the vegetative tips (10 to 15 cm long) are transplanted under water. Plants from gardens or natural environments are not suitable for this purpose. Only plants grown in high humidity (such as a greenhouse) can be transplanted under water." (pg. 351).

As submerged growth begins the leaf size, shape and color of the plant changes (This is also true of many of the plants that we grow in our aquariums).

It has been my experience, that many of the plants I purchase (both emersed and submersed grown) go through a transition/acclimation phase as they have to adapt to environmental conditions different from where they were previously. Most seem to grow slowly, at first, until the transition has been made, at which point growth increases to a more "normal" rate. A few (as was the case for me with this species – *Lobelia cardinalis*) have obvious trouble making the adaptation, to the new conditions. In these instances the plant (or plants) refuse to grow and begin to deteriorate and continue to do so until an environmental change is made or (in rare cases) dies.

In getting back to the main topic of the article, I purchased this plant (6 stems 3-4" long, as an H.A.P. by another GVAC member) at the March 2010 membership meeting. Initially the plants were placed in a 90 gal. aquarium. This tank was (at the time) lighted with a compact florescent fixture with 4 65 watt bulbs. Filtration was with a Fluval 405 canister filter. Substrate was a Flourite/gravel mix and the tank temp. was 82-84 deg. F. Water was a 2/3 RO - 1/3 tap water mix with weekly water changes of approximately 40%. Flourish, Flourish excel, and Flourish iron were added (at recommended dosages) after each water change. After a period of about 3 months 3 (50%) of the plants had deteriorated to the point that they were no longer viable and the remaining 3 were barely showing even minimal

growth. At this point the remaining plants were transplanted to a different tank.

The new environment consisted of a 29 gal. tank with a twin tube T5HO light fixture (48 watts total). Substrate was (and still is) Flourite Black sand and filtration was done by a Fluval 205 canister filter. Water was what came directly from the tap and temp. was 78-80 deg. F. Weekly (usually) water changes of 50-75% were made along with the addition of the same plant additives used in the 90 gal. tank. The plants slowly responded the environmental change by adding new growth. Approximately 10 months later CO2 supplementation was added to this tank (along with others) to which *L. cardinalis* responded very well by growing substantially faster than before the addition of CO2

(It is, however, still a slow growing plant)

L. cardinalis does not send out runners or form adventitious plants in its leaves, petioles, roots or inflorescences. Vegetative propagation of this plant is only accomplished the aquarist taking cuttings, (preferably 3-4 in. long), from the "parent" plant and placing them in the substrate, where after a few days (hopefully), they will form adventitious shoots.

I have been cultivating this species for a little over 2 years and I now have a nice group of plants in the original tank along with smaller groups in 2 other tanks, 2 of which have a 50/50 mix of RO and tap water with temps in the low to mid 80's (degrees F) and one with tap water in the mid to high 70's (degrees F). I find it a very attractive plant that looks its best in groups or rows. The

bright green of the leaves is a nice contrast to the darker greens of many of the other plants I currently maintain. It has been well worth the time and effort I've put into it and I plan to continue the cultivation of this species for the foreseeable future.

Christel Kasselman in her book **Aquarium plants** says: "Due to its unproblematic maintenance, *L. cardinalis* is a recommended and popular aquarium plant. The slow-growing species is undemanding as to water values, substrate and temperature (optimum range is 22-26 deg. C). For the most part, I agree with her statement as it is definitely a slow growing plant. I would, however, like to say that as for it being unproblematic in maintenance and undemanding to water values, etc., that it is, once it has adapted to the environment provided it –and that can be the challenge!



Grow Out Contest Round #1 and the Winner is. . .

By Chris Carpenter

Ilyodon xantusi where the fish chosen for the first round of the GVAC grow out contest. I know they belong to the Goodeid family, are a livebearer, can grow quite large (6"), and are pretty peaceful. However, my focus in this article is not on the fish itself but what I did to get them to grow at a good rate. On the night I brought home my 4 grow out fish I also purchased a bag of High Fin Cory cats from the GVAC monthly auction. I had an empty 10 gallon tank with a sponge filter, a Silica sand substrate (that I buy at Home Depot for \$4 a 50lb bag) and a temperature of 78 to 80deg so I put all of these fish into it and they stayed there for approximately 1 month.

During that time I feed them the same way I would feed all of my fish. I usually rotate between frozen foods such as Brine shrimp, Cyclops, krill, daphnia and bloodworms. Those are fed 3 to 4 times a week and the other days are a mix of several different kinds of flake and pellet foods. Two of my favorite flake foods are "Ocean Nutrition" and "Omega one." I like these because the first ingredient listed does not end with the word "Meal." The Pellet food I prefer is "New Life Spectrum" this can be ground up into smaller bites or powder to feed to growing fish or fry. I fed once a day on weekdays and twice a day on weekends. That's about all the time my schedule would allow. I tried to do a water change every week but it usually went to once every 2 weeks. The fish were doing very well in this environment. However, I needed that tank for fry and I just happened to have made space in a 46 gallon bow front tank that I knew they would be much happier in. These fish were "moving on up" not to the eastside but to my son Isaac's bedroom. Here they were once again joined by their friends the Corys and also 10 very small Angelfish and a breeding pair of Bristlenose Plecos.

Everything pretty much ran the same in this tank as it did in the 10 gallon aside from no sponge filter and instead a Marineland Penguin 200B and the introduction of "Repashy Super foods" which my fish and I really like. If you have this food and have not checked out Ted Judy's website and seen some of the interesting ways he has come up with to use it, I recommend checking it out "tedsfishroom.com."

On the night the fish were brought in to be judged I checked out the other fish mine were competing against and I honestly did not see that much difference in size, however, I did think mine had a lot more color. I sat down in my seat and started talking with another club member, friend and fellow grow out contestant "Kory Voodre" and he said to me "Stacy (his fiancé) said the reason I am going to win the grow out contest is because she fed the Ilyodons 6 times a day." I thought WOW that is a lot of feeding! Then came time for the announcement and I heard "the winner of the grow out contest is" Chris Carpenter." Awesome! I sold the Ilyodon xantusi in our monthly auction. I do still have an adult pair living happily in an aquarium I maintain at a dentist's office. I came home that night proud and anxious to tell my wife, Janet, what I had accomplished. In the midst of our conversation I told her what Kory had said to me and she said "I fed those fish every time I went into Isaac's room"and the winner should be... Janet Carpenter....

Big Dog Shop Hop VI

GVAC would like to thank MCAS (Motor City Aquarium Society), Randy Stier and Chuck Riffenburg for putting on another great shop hop. This was one of the biggest groups GVAC has had for one of these hops and it was truly a great day.

For those that don't know what a shop hop is let me explain. It is pretty much as it sounds; a group of people get together to go hopping from fish store to fish store. It is a great way to get your fix of fish and MCAS does a great job making sure you get your fix.

This year's shop hop featured 8 stops and a 7am departure. We started by meeting our hosts at McDonalds in Brighton. This stop allowed us West-Siders to stretch our legs.

Stop 1 was at Oyer's Home Fish Hatchery. They have a great home set up which can take some time to explore which is good as someone (we won't name him here) locked the rental van keys in the van and had to call AAA to get it unlocked.

Stop 2 was at Fantastic Fins. What does someone do when they have a love of fish and are into rare and unusual catfish? They open up a store called Fantastic Fins which is a must stop at store when you are in the Detroit Area.

Stop 3 was at Pet Suppliers. This is a small store but don't let the size fool you as there are a lot of fish hiding in those tanks and requires some hunting to make sure you don't miss anything.

Stop 4 was at Highland Tropical. This store is just down the road from Pet Suppliers. If you are in the Highland area you need to make the short drive. Rumor has it that a GVAC member got crabs here at the 2010 Big Dog Shop Hop.

Stop 5 was at Moby Dick's Pet Store. This is a truly a great local fish store. Try to hit the store when they are not busy (they are always busy) and take time to look into each tank as you will be surprised at the wide variety of fish they offer.

Stop 6 was at Lou's Pet Shop. A great feature of this store is the pond that has some large stingrays and redbtail catfish swimming around. It is always fun to see fish this big up close and personal.

Stop 7 was at Oceans & Seas. This store packed a lot of different fish into their tanks. They also have a great saltwater fish and coral selection for those that are interested in saltwater or those that just like to look.

Stop 8 was at Ichthyos Enterprises. This is another home breeder and our last fish stop of the day. This is a place where you feel like you could get lost. They have a large addition on their house and it is filled with hundreds of tanks with fish from gobies to rainbows and guppies to plecos.

The last stop of the day was at bad Brad's BBQ. Even though us West-Siders didn't stay for dinner this is a great place for BBQ and should be on your list of restaurants when you are in the New Baltimore area.

The drive back was quick, just try to keep up with Patrick when he is driving with a mission. We arrived back to our starting point just after dark and with time to drive home and put away our purchases before collapsing from exhaustion.

Big Dog Shop Hop VI



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 49548
www.Grandvalleyaquariumclub.org

There is no fee and everyone is welcome to attend!



Yet another native fish spawned by Ken Zeedyk. The photo is of a native brook stickleback, *Culaea inconstans*, fry.

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