Grand Valley Aquarium Club

GVAC Tank Notes

October—December 2013 Issue 62

Upcoming Meetings:

October: Mike Hellweg

November: Topic TBA

December: Holliday & Awards Party Members only

Inside this issue:

GVAC Fall Auction

October 26

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 9am & closes at 12:30pm

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

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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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GVAC Website: www.GrandValleyAquariumClub.org

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

Presidents Corner

Well, after an unusual summer, one that made it difficult for us ponders. We have entered the busy time for the club side of the hobby. There are many events coming up, SWMAS has the annual Fall Workshop, (Oct 12 & 13), GVAC's Fall Auction, Oct 26, Greater Chicago Cichlid Association has another swap, Nov 3, and if you've never been I highly recommend the Ohio Cichlid Association Extravaganza, Nov 22 thru 24. There are many more events coming up, and if you've never ventured outside of our local club, I really recommend checking out some or one of these events.

The state of our club is fantastic! It's turning out to be a banner year for the BAP & HAP programs, our participation and enrollment is up. GVAC has hosted some excellent speakers, Thank you Ben, and I still get compliments over our hosting of the ALA convention. Please remember this is your club, if you have an idea for a speaker or an event, please share it with a board member. As a final note board elections are fast approaching, please consider running for a position, or if you think someone is uniquely qualified for a position talk to them about running. GVAC is a great club, and we need all of you, to help with events, and to help our club to continue to grow. I encourage you to bring a friend to one of our meetings or events. It doesn't matter if someone runs one tank, or has a fish house, all hobbyists are welcome, we are about sharing information and knowledge.

Best Fishes,

Mike Monje

Some people will do just about anything to collect live food. This photo, taken by Ken Zeedyk, shows GVAC members Mike Monje and Patrick Miller collecting copepods at Hall Lake in the Yankee Springs Recreation Area. This lake is unusual in that there are enough copepods, mostly Daphnia and Cyclops, in the open water that they can be easily collected using a plankton net.

Since this photo was taken a plankton net with a handle has been made so that someone doesn't need to get wet to collect. However, for those that are interested in exploring our native fish and the environment, Hall Lake is an excellent place for snorkeling.

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
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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

October 6 — GreenWater Aquarist Society Fall Auction
Apollo Recreation Center
12521 South Kostner Alsip IL 60803
www.gwasoc.com

October 12 — GVAC Meeting
Speaker: Mike Helleweg

October 12-13 — SWMAS Fall Workshop & Auction
Plainwell Community Center
798 E. Bridge St Plainwell MI 49080
Registration 9:30am—Auction 11am
www.SWMAS.org

October 19 — GDAS Fall Auction
814 North Campbell RD Royal Oak, 48067
Registration 9:30—Auction 11am
www.greaterdetroitaquariumsociety.org

October 26 — GVAC Fall Auction
Home School Building
5625 Burlingame SW Wyoming MI 49509
Registration 9:30am—Auction 11am

November 3 — GCCA Swap Meet
4400 Frontage Rd Hillside IL 60162
10am—2pm
www.gcca.net

November 9 — GVAC Meeting
Topic: To be confirmed

November 9 — MCAS Fall Auction
Madison Place
876 Horace Brown Dr, Madison Heights MI
Registration 9am—Auction 10:30am
www.motorcityaquariumsociety.com

November 22-24 OCA Extravaganza
Holiday Inn Strongsville
www.ohiocichlid.com

December 14 — GVAC Year End Party
Location: TBA
Members only

January 11 — GVAC Winter Swap
Home School Building
5625 Burlingame SW Wyoming MI 49509
10am—2pm

January 11 — GVAC Meeting
Topic: To be confirmed

February 8 — GVAC Meeting
Topic: To be confirmed

March 1 — MCAS Spring Auction
Madison Place
876 Horace Brown Dr Madison Heights MI
Registration 9am—Auction 10:30am
www.motorcityaquariumsociety.com

March 22 — GVAC Spring Auction
Home School Building
5625 Burlingame SW Wyoming MI 49509
Registration 9:30am—Auction 11am

My Journey to CO2 injection

By Justin Sarns

I have been playing around with planted tanks since I got into the hobby, and inevitably the tank would end up returning to an African Cichlid tank, only to re-emerge when I had space again. I slowly evolved from low light plants to high light plants with a T5HO on the tank.

I could never convince myself to jump into CO2 injection. Then I saw Steven's article on DIY CO2 and thought I would try it. I set it up on my tank and the growth tripled. Reds seemed to pop out more, and the leaves looked healthier. However, the set up soon began leaking and not functioning well. I repaired it and we were back in business!

Then I moved. I tried again and again, but I couldn't get it to reseal and work well. After a mess on the floor caused by the reactor, I decided it was time for a new set up. I tried an injection system made by Fluval and was very impressed… until the cartridge ran out of gas five days later. After much pondering I decided to purchase a regulator, adapter (found at a homebrew store) and paintball tank for a total of $100.

The system works great. I have enough gas to get the plants to grow well, and not run out in a week! The CO2 combined with EI dosing causes so much growth that I am trimming on a daily basis! If you are thinking of going all out on a planted tank spend the little extra and go for a paintball setup. You won't regret it!

1. Female Flower
2. Male Flower
3. Floating leaf

Often times aquatic plants don't show their full range of growth forms in our aquariums. *Sagittaria subulata* is one of those plants. In most tanks it grows short stiff leaves. However, in the right conditions, such as in a tub outside, it will produce floating leaves as shown above. In shallow water, it will also produce flower spikes which contain both male and female flowers, on the same spike, but not at the same time.

Summer tubs/ponds can be a great way to get your aquatic plants to flower and maybe even to propagate them sexually.

Alternanthera reineckii "cardinalis"

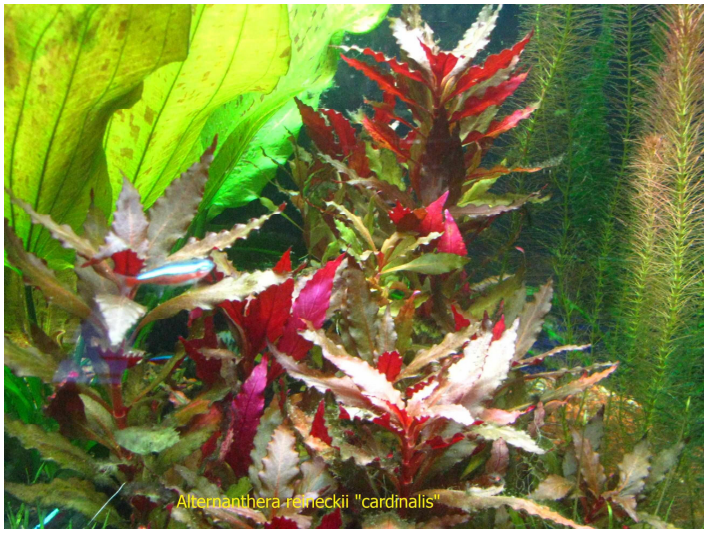
Common name: Telanthera

By Roger Miller photo by the author

The parent plant, *Alternanthera reineckii*, occurs naturally in South America. *Alternanthera reineckii* "cardinalis", being a cultivar of the parent plant, has no natural distribution.

It is a light-hungry stem plant that requires a nutrient rich substrate and CO2 is strongly suggested. The stems need to be spaced out so as not to interfere and impede each other's growth. If lighting is inadequate, or the stems to close together (blocking light to the lower leaves), the leaves will die.

I purchased my plants, as tissue cultured specimens, through the local outlet of one of the national chain pet stores. Tissue cultured plants, as the name suggests, are cultured in a nutrient rich gel-like medium, and are advertised as snail and pest free. They were packaged in a sealed plastic bag containing some of the nutrient gel, the bag being enclosed in a cardboard pouch, for display purposes, printed with the plant name and information and cut out so that the plants could be viewed in the package. A neat and tidy little package.



Not having any previous experience with tissue cultured plants, I was somewhat skeptical, as well as curious as to how they would turn out.

The package contained 10-12 small stems (2-2 ½ " tall) that were already developing roots. The gel was rinsed off the plants and which were then divided into equal groups then planted (as is my custom) in two separate tanks. One a 90 gallon and the other a 29 gallon. The 90 gallon has Flourite (regular) as a substrate while the 29 gallon has 1/3rd of the tank with Flourite dark and the remainder is Flourite black sand. Both tanks share the same water mix (1/3rd tap & 2/3rd R.O.) are maintained at the same temperature of 82-84 deg. F, and are supplemented with CO2 for 6 ½ hrs. daily, flourish and flourish iron are dosed, at the recommended levels, weekly with water changes occurring at least biweekly (and usually more often). The 29 gallon is lighted by a twin tube T5HO fixture with 6700K bulbs for 10 ½ hrs. a day while the 90 gallon has one four tube T5HO and one twin tube T5HO light fixtures, both with 6700k bulbs, as this is a larger and much deeper tank. The lighting is on daily as follows: 2 tubes @ 10 ½ hrs. daily, 4 tubes @ 8 ½ hrs. daily, and all 6 tubes @ 4 hrs. daily.

There was very little difference in growth rate of the plants between the two tanks.

Vegetative reproduction is by cuttings. Remove 6-8" below the tip of the stem and replant, the portion remaining in the substrate will then produce lateral side shoots to replace the severed tip.

This is a very colorful plant, the stems and underside of the leaves being a bright red in color with the upper side being a more subdued red, but it needs the bright light and with the proper nutrients and conditions for it to look its best. It is not a plant for low tech tanks which means that it will take some effort, in both time and money, to be successful with it. But by adding in a nice splash of red to contrast with all those different shades of green, in your tank you can change its whole appearance and make it look like a completely different tank.

Once you go red, you can't go back!

Apistogramma macmasteri

By Kory Voodre photo by the author

I acquired a wild caught pair of *Apistogramma macmasteri* from Aquatic Clarity when attending the GCCA swap meet in Chicago. After a lot of research, I placed the pair in a 10 gallon tank. The temperature was roughly 80 degrees and the pH was about 7.8.

They quickly paired up. There were multiple options for spawning sites, Cichlid stones, small terracotta pots, and driftwood. The pair spawned with in 3 weeks and was very shocking to see all the small fry with parents in about 6-10 days. The pair did a great job parenting, however, I quickly removed 10 fry to make sure that no matter what, I had 6 to turn in for BAP.

In total, I have roughly 25 fry that made it. The fry grow extremely slow and at 90 days old they are barely a half inch, even with changing water several times a week and feeding multiple times a day. This is the first Apistogramma I have spawned and will certainly not be the last.

2013 BAP Totals January—September

Chris Carpenter—25
Lamprologus callipterus
Pseudotropheus saulosi
Pseudotrophues williamsi "North Makonde"
Steatocranus tinanti
Tropheops macropthalmus
Gambusia holbrooki
Xenotaca eiseni 'Tamazula'
Haplochromis tomato sp. 35
Julidochromis dickfeldi
Maylandia lanisticola
Metriaclima estherae
Melanotaenia splendida
Corydoras aeneus
Corydoras paleatus
Steatocranus caesurius
Telmatochromis sp. Orange scribble
Melanochromis joanjohnsoni
Chapalicthys encaustaus
Girardinus metalicus
Poecilia butleri
Physa sp.
Aphanius mentos
Characodon lateralis 'los berros'
Limia vittata
Herotilipia multispinosa

Kory Voodre—22
Geophagus steindachneri
Steatocranus tinanti
Thorichthys sp "Mixteco Gold"
Gambusia holbrooki
Limia melanogaster
Poecillia butleri
Neocaridina heteropoda Red Rilli
Corydoras paleatus
Corydoras aeneus
Apistogramma macmasteri
Pelvicachromis pulcher
Haplochromis Sp. 35 "Tomato"
Poecilia wingei
Lepidolamprologus hecqui
Neolamprolus multifasciatus
Hemichromis guttatus
Characodon lateralis 'los berros'
Asolene spixi
Neolamprologus brichardi
Aulonacara jacobfriebergi
Lamprologus ornatapinnis
Cyprichromis leptosoma 'utinta'

Tom Siegfried—20
Macropodus opercularis
Labidochromis caeruleus
Nimbochromis venustus
Pelvicachromis pulcher
Pundamilia nyererei 'Mwanza Gulf'
Limia melanogaster
Limia perugiae
Poecillia butleri
Xenotoca eiseni 'Tamazula'
Melanotaenia maccullochi
Corydoras aneus
Labidochromis chisumulae
Neolamprolus multifasciatus
Pseudotrophues williamsi 'North Makonde"
Tropheus duboisi white band
Xiphophorus helleri
Julidochromis regani 'kipili'
Pseudotropheus blue dolphin 'Manda'
Chromidotilapia guentheri
Pelvicachromis taeniatus 'Moliwe'

Justin Sarns—17
Metriaclima greshakei
Pelvicachromis pulcher
Protomelas spilonotus 'Mara Rocks'
Thorachromis brauschi Lake Fwa
Xiphophorus helleri
Protomelas taeniolatus
Haplochromis sp. Ruby Green
Aulonocara jakobfribergi Eureka
Astatotilapia nubile
Cnesterdon decemmaculatus
Poecilia wingei
Otopharynx lithobates
Chromidotilipia guentheri
Paralabidochromis chromogynos
Psuedotropheus saulosi
Protomelas sp 'tangerine tiger'
Clea helena

Mike Monje—14
Ancistrus L279
Julidochromis marlieri
Julidochromis ornatus 'chitika'
Heterandria formosa
Xenoophorus captivus
Ilyodon cortesae
Poecilia butleri
Ancistrus sp. 3 calico
Haplochromis sp. Red tail sheller
Xiphophorus nezahualcoytl
Macropodus opercularis
Amatitlania sp. 'homduran red point'
Lamprologus orantipinnis
Poecilia orri

Ken Zeedyk—13
Hemigrammus erythrozonus
Aspidoras spilotus
Corydoras venezuelanus
Rhinogobius rubromaculatus
Poecillia butleri
Danio albolineatus
Elassoma okefenokee
Jordanella floridae
Girardinus metallicus
Girardinus falcatus
Ichthyosaura alpestris apuanus
Xiphophorus evelynae
Fundulus diapahnus menona

Roger Miller—9
Mikrogeophagus ramirezi
Girardinus metallicus
Xiphophorus variatus
Iriatherina werneri
Melanotaenia madagascar
Corydoras melini
Apistogramma cacatuoides 'double red'
Pterophyllum scalare
Lamprologus caudopunctatus 'red fin'

Jeff VanderBerg—8
Ancistrus sp.
Ctenochromis horei
Mikrogeophagus ramirezi
Pterophyllum scalare
Chapalichthys encaustus
Xenophallus umbratillis
Xenotoca variata
Ampullaria cuprina

Cyndi Westra—7
Altolamprologus calvus
Cynotilapia sp. White top hara
Cyrtocara moorii
Neolamprologus multifasciatus
Neolamprologus pulcher
Placidochromis phenochilus

Heather Burke—7
Xenophallus umbratillis
Xiphophorus maculatus
Poecilia reticulata
Haludaria fasciatus
Danio aesculapii
Macropodus opercularis
Danio erthromicron

Patrick Miller—7
Pelvicachromis taeniatus 'Moliwe'
Girardinus metallicus
Neoheterandria elegans
Danio roseus
Brachyraphis olomina
Nomorhamphus towoetii
Limia dominicensis

Kim Oge—6
Corydoras paleatus
Neolamprologus multifasciatus
Corydoras Panda
Ancistrus Sp.
Oryzyas woworae
Pelvicachromis pulcher

Travis Henkaline—5
Aulonocara sp. 'Red dragon'
Neolamprologus brichardi
Xiphophorus helleri
Xiphophorus nezahualcoyotl
Pseudotropheus elongatus

Dan Kraker—5
Haplochromis sp. Red Tail Sheller
Metriaclima sp. 'Membe deep'
Lamprologus ocellatus 'gold'
Sciaenochromis fryeri
Neocaridina heteropoda

Tim Monje—5
Ancistrus sp.
Girardinus falcatus
Procambarus fallas f. virginalis
Clea helena
Macropodus opercularis

David Gruszecki—4
Metriaclima lombardoi
Poecilia reticulata
Xenotaca eiseni
Xiphophorus helleri

Steve Hosteter—4
Labidochromis caeruleus
Ilyodon cortesae
Xenotoca eiseni 'Tamazula'
Xiphophorus maculatus

Scott Tetzlaff—4
Cryptoheros chetumalensis
Gephyrochromis lawsi
Poecillia orri
Laetacara thayeri

Melissa Dehann—3
Xenotoca variata
Melanotaenia splendida
Ancistrus Sp.

Tim Boelema—2
Brachyraphis roswithae
Girardinus uninotatus

Tyler Mays—2
Synodontis petricola
Pterophyllum scalare

Mike Miles—2
Procambarus sp marmorkrebs
Limia melonogaster

Jeff Riemersma—1
Pelvicachromis pulcher

Kenny Valentine—1
Poecillia reticulata

Andrew Kalafut—1
Xenophallus umbratillis

Philip Kukulski—1
Herichthys Carpintis

Phil Wurm—1
Pomacea bridgesii

BAP by the #s

Number of Participants 27

Number of fish turned in 200

Number of species Lots

Deadline for hatching/birth was September 9.

BAP may also be turned in at the GVAC October 26 Auction.

Breeder Addiction Problem

By Chris Carpenter

BAP

Purpose:

* To encourage members of the aquarium club to breed fish and share knowledge concerning the spawning and rearing of fish.
* To recognize the achievements of club members concerning the breeding of fish.
* To promote an interest in and make available a wider variety of fish.
* To make more members active participants in the society.

This is a very accurate description of our BAP program. For me, it has done everything stated and I love participating. Nowhere in the description does it state that the purpose is to become stressed, angry or ultra competitive. However, that is what I did and it essentially ruined any fun I had in my fish room this year.

A phone call and smack talk is how 2013 started for me. Tom Siegfried and I ended 2012 with exactly 30 BAP points. Tom and I were conversing one evening and I started running my mouth about how many fish I was breeding, Tom had also bred a lot. We decided to start a race to 50 total spawns. The winner would buy the other dinner at Red Lobster. I had a really good start. It was going to be a tight race, or so I thought.

I came out of the gates strong and by February I was close to 20 spawns. That is when things started to go down hill. I ran out of room. I started to combine fish that had no business being in the same tank, resulting in many losses due to stress from aggression and overcrowding. I was also pushing the limits of the amount of breeders I could keep. Moving out fish I had spawned and bringing in fresh stock. This created a new set of problems. Once again, I lost many fish due to stress. I also brought a nasty fungus into my fish room which I quickly spread around many breeder and fry tanks. I spent hundreds of dollars on antibiotics and medications along with many long nights researching fish disease. I beat the fungus but lost many fish. Like my fish, I was now extremely stressed. With every fish or batch of fry I lost I was heartbroken. Not only was I losing the race but I was watching many lives pass.

Being a competitive man, I can be easily provoked. A little bragging or trash talk is enough to get me fired up. There was some serious bragging going on amongst some friends in the club, myself included. I got very charged and started to push the limits of my room again with similar results. There are many times I wanted to smash my egg tumblers and scream that my airline was not working! You would think I would have learned. Eventually I did. I needed to reevaluate why I was breeding fish. Was it to beat my friends in a competition or was it to enjoy keeping and breeding quality fish? The answer was obvious. This competitive crap was killing me.

I have learned a few things this year. 1. No trash talk! (ok, maybe a little;) 2. I will make sure I have room for fry that is either alive or coming soon, even if that means I wont have room for that rare fish I have been longing for. 3. I wont allow myself to get too wrapped up in the whole numbers game. That can become very aggravating. 4. Every year I am going to set small personal goals and once that goal is reached anything beyond that is a bonus. I hope others can learn from my mistakes.

Now that I have taken the pressure off myself and my fish, I am having fun again, and fish are breeding that I did not expect. I will get my 20 spawns this year to put me at 50 and the title of "Expert Breeder". I don't consider myself an expert, however, I do think I have advanced. Not just in breeding skill but also by acknowledging the mistakes I have made and committing to not repeat them. A very valuable lesson in my opinion.

The goal for 2013 was to beat Tom in the race to 50, which I lost. We did have our dinner at Red Lobster, although it was a surprise 40th birthday party for me.

After all is said and done 2013 has been a very trying yet rewarding year for me when speaking of breeding fish. I realize that I am truly a fishaholic and if I let it get the best of me I can have a serious **B**reeder **A**ddiction **P**roblem, if I do things the right way I can have a **B**reath e**A**sy **P**astime.

Plants and African Cichlids

By Justin Sarns

When I first got into aquaria, the shapes and colors of African Cichlids, and the beautiful flora of a planted tank fascinated me. I was quickly told that the two could never mix. Now, there is some truth to that statement. For example, stem plants that need CO2, high light, and have poor root structure would never survive. However, there are many plants that do well with African Cichlids when they are used properly. The most obvious group of plants are the Anubias plants and java ferns. These plants have hard leaves that taste bitter to fish (so I have been told). I have had a large Anubias in with a colony of *Pseudotropheus saulosi* and I have never had a single leaf nibbled on. I have also had great success with Vallisneria and Rotala, although the Rotala was not in the tank for long since I didn't like the look.

I have also had good luck with plants and Cichlid fry. My current fry tank has a pot of Dwarf Sag, a Red Rubin Sword, and several other swords and lotus plants. The fry don't touch the plants, and they seem to like hiding in the stems.

If you are considering mixing plants and African Cichlids, it is important to think about what species. Generally, Mbuna are a poor choice for any plants with the exception of Anubias. Haps and Peacocks do much better, as they are less likely to consume plants in the wild.

The final thing to consider is plant placement. Africans have a habit of digging through the sand or gravel and uprooting plants. Plants that attach to rocks are ideal since they can't be dug up. Potting other plants or surrounding them in rocks can help keep the plants anchored in the tank.

African Cichlids and plants can coexist if the proper steps are taken. The plants help provide a more natural environment and provide hiding places for young fish and old fish alike.

2013 HAP Totals January—September

Roger Miller
Vegetative
Cryptocoryne albida
Echinodurus 'Tanzende Feverfeder'
Blyxa aubertii
Blyxa japonica
Hydrocotle sibthorpinides
Lysimachia nummularia
Rotal sp. 'Bangladesh'
Salvinia oblongifolia
Nesaea pedicellata
Nesaea crassicaulis
Salvinia cucullata
Hydrothrix gardneri
Sagittaria platyphylla
Cryptocoryne parva
Ammannia senegalensis
Flowering
Alteranthera reineckii 'Cardinalis'
Blyxa aubertii
Cypress heliferi
Phyllanthus fluitans
Polygonum kawagoeanum
Echinodurus 'Tanzende Feuerfeder'
Bacopa monnieri
Sexual
Persicaria kawagaeanum

Justin Sarns
Vegetative
Anubias coffeefolia
Aponogeton ulvaceus
Cambomba pulcherrima
Cryptocoryne usterana
Cryptocoryne wendetti 'red'
Hygrophilia corymbosa
Hygro polysperma 'Vesurius'
Ludwigia repens
Microsorum pteropus
Rotala magenta
Shinnersia rivularis
Vallisneria Americana
Myrophyllum mattogrossenae
Ammania gracilis
Potamogeton gayi
Echinodarus xingu
Didiplis diandra
Pogostemon erectus
Anubias nana
Cryptocoryne Moehlmanni
Sagittarra subulata
Cryptocoryne balanse
Alternanthera reineckii 'Cardnalis'
Polygonum sp. Kawagoeanum
Bacopa monnieri
Rotala indica
Rotala sp. Type Two
Flowering
Anubias coffeefolia
Aponogeton ulvaceus
Echinodorus sp. 'Ozelet'

Mike Monje
Vegetative
Limnobium spongia
Hygrophilia pinnatifida
Shinnersia rivularis
Ranunculus inundates
Nymphoides sp. 'Taiwan'
Persicaria sp. 'Kwawgoeanum'
Hydrocotyle sibthorpioides
Echinodurus angustifolius
Flowering
Iris pseudacorus
Houltuynia cordata

Steve Hosteter
Vegetative
Heteranthera zosterifolia
Rotala sp. 'Bangladesh'
Subwassertang
Rotal sp. 'vietnam'
Lysimachia nummularia
Ludwigia repens
Microsorum pteropus 'Windelov'
Salvinia cucullata
Flowering
Aponogeton crispus

Andrew Kalafut
Vegetative
Cabomba caroliniana
Ceratopteris thalictroides
Echinodurus augustifolia 'vesuvius'
Echinodorus bleheri
Echinodorus parvifbrus 'tropica'
Myriophillum mattogrossense
Rotala maccanda
Cabomba pulcherima
Cabomba furcata

Dan Kraker
Vegetative
Vallisneria american
Anubias barteri 'nana'
Heteranthera zozterifolia
Flowering
Anubias barteri 'nana'
Nymphaea odorata
Heteranthera zozterifolia
Iris pseudacorus

David Gruszeki
Vegetative
Aegagrophilia linnaei
Cerataphyllum demersum

Patrick Miller
Flowering
Sagittarius subulata
Sexual
Nelumbo nucifera

Melissa DeHaan
Vegetative
Vallisneria Americana
(synonym gigantean)

GVAC member, Kory Voodre, with his display tank at the Michiana Show

GVAC member, Chris Carpenter's show tank at the Michiana show

Wild Daphnia

By Patrick Miller photos by the author

Some aquarists will take the trouble to cultivate Daphnia to feed to their fish. This is a worthwhile endeavor, but it isn't for me. In the past, my cultures have lasted for about 2 weeks before I just took the whole culture and added it to a tank or added fish to it. I am just not cut out to culture Daphnia.

Tom Siegfried collecting in a pond

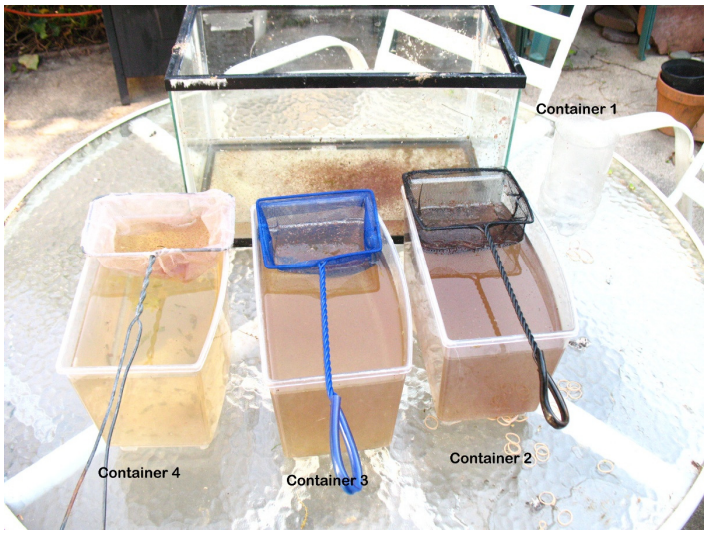
Lucky for me there is an alternative. I collect Daphnia from vernal ponds and one very special lake (it isn't normal to find big enough concentrations of Daphnia in lakes to make it worth while collecting in them). To collect in the wild all you need is a spot to collect, a net with a small mesh, and a bag to put your catch into. When collecting in vernal ponds you can start as soon as there is no ice covering them or when they fill with water. This can continue until you find that you catch more mosquito larva than Daphnia (many people will not have a problem with that), the mosquitos start biting, or there is not enough water to collect in.

There are several problems with collecting wild Daphnia; primarily, you never know what you are going to collect. While ponds that are dry during part of the year might not have hydra in them, they will most assuredly contain other items, like water bugs and dragon fly nymphs that you will not want to put into your fish tanks.

Photo of a Daphnia under a microscope

That means that you need to have a plan to separate the unwanted bycatch from the food you want. I employ several strategies when I am done collecting; however, the system I normally use is a 3 net system. For this, you will need to have 7 containers, 3 nets with different size mesh, and a cup to pour with.

You will start with one large container/bucket with all of the collected animals in it. You may want to add some aged/treated water to this container or to the containers you will be adding

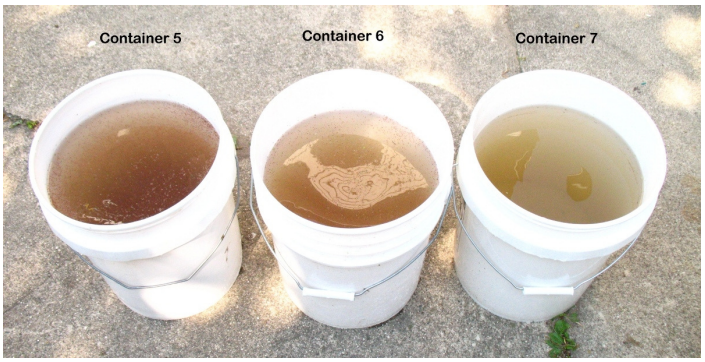


the sorted food into. Starting with the net with the largest mesh openings, net 1, you take a cup of water from the container 1 and pour it through the net and into container 2. Shake the net to ensure that all of the smaller animals make it through the mesh. All of the items left in the first net can be discarded or put into a separate container for feeding to adult fish.

You will then take the water from container 2 and pour it through net 2 and into container 3. After shaking the net, the items left in the net will be the large food population and can be added to container 5. The water from container 3 is poured through net 3 and into container 4. After the net is shaken all that is left in net 2 is the medium sized food and can be put into container 6.

The items in container 4 are the small size food and can be added to container 7. While this food will grow over time, it is normally suitable to feed to even the smallest of fry.

This process is completed when nothing is left in container 1. The result is live food that has almost all unwanted bycatch, such as harmful invertebrates and late stage mosquito larva, re-



moved. It is also now sorted so that it can effectively be target fed to the fish that it is most appropriate for resulting in less waste and better growth of your fish.

If you haven't tried collecting your own live food you should think about it. It can be a fun way to spend a morning or to get wet by tripping and falling into the water as I often do.

Happy fish feeding .

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

Auction Tips

When bagging fish, fill the bag with 1/3 water 2/3 air. Proper fish bags can be purchased online at Jehmco.com or kens-fish.com if you only need a few, local stores may be generous and give you a few or sell you some. Club members may also have some for sale or trade.

Use 1/2 aged/treated water and 1/2 tank water when bagging.

Double bag fish that have sharp spines or are likely to puncture the bag.

Don't feed the adult fish you plan to sell for at least 24 hours before bagging. This will cut down on waste in the bag and the fish will travel better.

Bag aggressive fish, like African Cichlids, separately and then tie or tape the bags together.

As soon as the fish are bagged, put them in a dark cooler or styro to help calm the fish.

Clearly write or print labels and provide as much information as you can about the contents of the bag.

Bring a pen to the auction so that you keep track of bag #s that you want to purchase, or have purchased.