



# Tank Topics

The Official Publication of  
The Greater Akron Aquarium Society



**December 2008**  
**January 2009**

**In this issue:**

- *Madagascar Lace Plant*
- *Aquarium Photogray*
- *Corydoras C89*



# THE GREATER AKRON AQUARIUM SOCIETY

**WHO ARE WE?** We are a local group of aquatic enthusiasts. Formed in 1952, the Greater Akron Aquarium Society is a non-profit, non-commercial organization. Our membership ranges from the beginning hobbyist to the advanced aquarist with many years of experience. The goals of our club are to promote the care, study, breeding and exhibition of aquarium related aquatic life and to promote interest in the aquarium hobby.

**MEETINGS:** Our meetings are held on the first Thursday of each month at 8:00 p.m. at the Mogadore Community/Senior Center, 3857 Mogadore Road, Mogadore, Ohio. It is located East of Route 532 across from McDonald's in the former post office building (see map on inside back cover) Visitors are always welcome, it costs absolutely nothing to attend a meeting and look us over.

**MEMBERSHIP:** The cost is only \$750 for adults, \$10 for a couple or a family (includes children under 10 years of age) and \$5.00 for a junior membership (10 to 17 years) Membership provides an opportunity to socialize with other that share your interests, a subscription to our bi-monthly magazine, library usage and more.

**AGENDA:** Our meeting agenda is simple and informal. The meeting will begin at 8:00 p.m. with a short business meeting. Immediately following is the program for the evening which usually lasts about 45 minutes. Our programs consist of a speaker, slide program, movie or perhaps a panel discussion always on a particular subject related to the hobby or various species of fish. Following the program is a short refreshment break. After which the winners of the Bowl Show are announced, the Breeder's Award Program fish are auctioned and tickets are drawn for the equipment and book raffles.

**THE BOWL SHOW:** Each month members can bring in fish for specific classes to compete for first, second and third place awards. The charge for each entry is only \$.25. Members also compete for annual awards by accumulating wins throughout the year.

**BREEDER'S AWARD and HORTICULTURE AWARD PROGRAMS:** members can receive recognition for spawning species of fish or propagating aquatic plants. All that is required is to turn in a minimum of six fry from the spawn that are between 30 and 90 days old. Members earn certificates for each species and can work towards plaques in different categories.

**LIBRARY:** At the library table are a number of books and other publications covering all areas of the aquarium hobby. Members may borrow the books for a month at a time. Also each month several books are raffled off.

**EQUIPMENT RAFFLE:** The raffle table has such items as tanks, fish food and aquarium accessories that are donated by national manufacturers, area dealers or purchased by the Society. Tickets may be purchased by anyone attending the meeting. Save your losing tickets for the Christmas Party raffle.

**ANNUAL SHOW:** The Ultra-Aqua show is held the first weekend of August at the Tallmadge community Center. This has become one of the largest all-species tropical fish shows in North America. It is an international gathering of hobbyists to display their fish in class competition, talk fish and to learn about the hobby from each other.

**TANK TOPICS:** is published on a bi-monthly basis for the members of the Greater Akron Aquarium Society. Articles and comments for this publication are welcome and encouraged. Such articles are to be submitted no later than the board meeting prior to publication. All articles may be reprinted as long as the author(s) and GAAS are given proper credit and two copies of the publication containing the reprint are sent to GAAS. Please send any correspondence regarding this publication to:

Editor/Tank Topics  
P.O. Box 494, Akron, OH 44309-0494  
Or email to [G\\_A\\_A\\_S@hotmail.com](mailto:G_A_A_S@hotmail.com)





# Table of Contents

President's Message .....	Bud White .....	4
Editor's Message .....	Dave Williamson.....	5
Bowl Show/Special Activities .....	Dan Frase .....	6
BAP/HAP Report .....	Wayne Toven.....	8
Meeting Notice .....		10
Coming Events.....		11
Exchange Report .....	Wayne Toven.....	12
Basic Aquarium Photography .....	Bob Miller .....	14
<i>Corydoras</i> C89.....	Carolyn Hanlon .....	18
A Fairy Tale.....	Author Unknown.....	19
<i>Aponogeton madagascarensis</i> .....	Wayne Toven.....	21
Toledo Zoo Tirp Photos .....		24
Swap Meet.....		26

## Tank Topics Production Staff:

Editor	Dave Williamson
Exchange Editor	Wayne Toven
Artists	Pat Maloney, Becky Sosenko, Steve Tyleshevski, Dan Frase

**This issue's cover:** *A leopoldi* stingray taken at the Toledo Zoo. For more photos from that trip see pages 24 & 25.

## 2008 GAAS Board of Directors

President .....	Bud White.....	(330) 848- <a href="mailto:3856/bud@gaas-fish.net">3856/bud@gaas-fish.net</a>
Vice President.....	Jeff Plazak.....	(330) 854- <a href="mailto:5257/jeff@gaas-fish.net">5257/jeff@gaas-fish.net</a>
Treasurer .....	Rich Serva.....	(330) 650- <a href="mailto:4613/rich@gaas-fish.net">4613/rich@gaas-fish.net</a>
Secretary.....	Nicole Schmid.....	(330) 312- <a href="mailto:1581/nicole@gaas-fish.net">1581/nicole@gaas-fish.net</a>
Editor .....	Dave Williamson.....	<a href="mailto:davew@gaas-fish.net">davew@gaas-fish.net</a>
Special Activities .....	Dan Frase .....	(330) 784- <a href="mailto:3565/danf@gaas-fish.net">3565/danf@gaas-fish.net</a>
BAP/HAP .....	Wayne Toven .....	(330) 256-7836/ <a href="mailto:wayne@gaas-fish.net">wayne@gaas-fish.net</a>
Membership.....	Bob Miller.....	(330) 472- <a href="mailto:4391/bob@gaas-fish.net">4391/bob@gaas-fish.net</a>
Raffle .....	Christina & Bud Biederman.....	(330) 573-5398/ <a href="mailto:christina@gaas-fish.net">christina@gaas-fish.net</a>
Librarian.....	David Girard.....	(330) 945- <a href="mailto:4606/daveg@gaas-fish.net">4606/daveg@gaas-fish.net</a>
Historian .....	Phil & Tiffany Hypes.....	(330) 327- <a href="mailto:6316/phil@gaas-fish.net">6316/phil@gaas-fish.net</a>
FAAS Rep.....	Bob Cisney.....	(330) 569-3234
Refreshments.....	Bill & Linda Koleszar .....	(330) 626-5660
Publicity.....	Amy Mullens.....	<a href="mailto:amy@gaas-fish.net">amy@gaas-fish.net</a>
Program.....	Dan McMonigle.....	(440) 476-4663/ <a href="mailto:danm@gaas-fish.net">danm@gaas-fish.net</a>
Web Master .....	Ron Mullens .....	<a href="mailto:ron@gaas-fish.net">ron@gaas-fish.net</a>

Check out our web site at: [www.gaas-fish.net](http://www.gaas-fish.net)

# President's Message

Bud White



Well HAPPY HOLIDAYS folks, Several things to say here, so listen up!

First of all, congratulations to Phil and Tiffany Hypes, the new Raffle chairpersons have added a new member to their family and her name is Zoe Elizabeth.

Next the elections went well, no fighting or yelling, just a smooth election and new board members added. Jeff did his usual fine job of running the elections.

The Christmas meeting plans are well on the way. We will have the fish and plant items again, like last year. There is a gift exchange going on also. If you want be a part of it, just bring in a small gift to put on the table and you will get a ticket to be included in that drawing.

The Gold barb growth program will be judged at the Christmas meeting also. Just bring your fish in a container so it can be seen and judged for size.

The refreshment people, Bill and Linda will be supplying the main course for the meeting and we would like to ask that you bring a side dish of your choice to add to the selection. Please bring a large spoon with it, if one is needed.

We are working on the Jan 2009 meeting date, the regular meeting would be on New Years Day and that does not sound like a good idea. We are trying to get the second Thursday lined up, but have not heard from the hall yet. We will be sure everyone knows what happens here.

That's all folks, Bud.



**Mon-Sat 12-8**  
**Sunday 12-6**

**West**

6629 Engle Rd. Unit 108  
Middleburg Hts., OH  
(216) 433-3340

**East**

4927 Robinhood Dr  
Willoughby, OH 44094  
(440) 975-9090



# Editor's Message

Dave Williamson

Wow, do I have a lot of things to bring up but not a lot of space to do it this time.

First up, in order of appearance we have our Fall Zoo & Aquarium Trip to the Toledo Zoo. We had a nice turn out of members, friends and family this time. It ended up being a nice day so wandering around the rest of the zoo after our scheduled behind the scenes tour was great. There are two pages of photos from it elsewhere in this issue. Some of the pictures are mine, some are Ron Mullens' and some belong to Bob Miller. I was kind of getting all creative making a collage and ran out of space to put the photo credits! I think it worked out so nice that I figured I'd leave the ones from the Fall Auction until next issue.

Speaking of that auction, we had yet another successful one. As an added bonus, by being able to get into the hall the night before, it was a very low stress day. Thanks to all who helped out, it's you who make these functions successful.

At our last meeting we had our club elections. As has been the case the last few years, it wasn't as much of an election as confirming our nominations. I'm not complaining though. Lots of these hobby clubs are having trouble getting all of their positions filled and at least we were able to accomplish that without having to beg!

Now, on to things that haven't happened yet! Our December meeting is our annual Christmas party, you'll find more information about it in the meeting notice section of this issue. It's a really good time so try to make it and participate in any or all of the things going on. While on the subject of our meetings, you might notice that there is some question as to the date of our January meeting. As of the deadline to print this and get it to you before the December meeting, the hall hasn't let us know if we can move the date or not. Thankfully there will be a meeting notice go out before that time to let you all know. One final thing about the meetings is that we decided at the last board meeting that we need to be a little more prompt getting the meetings started at eight so we can get done sooner.

I'll see you at the meeting! (and yeah, I'll try to be on time for a change!)

# Bowl Show & Special Activities



Dan Frase

Sorry about the mixup - I updated a copy of last year's Bowl Show totals in the last issue. Points are a bit different, but the leader's the same. Wayne Toven has won the year with 121 points. Jeff Plazak came in second place with 71 points, and Dave Williamson came in third place with 26 points. So Wayne won again, but Jeff and Dave switched places this year. Be sure to bring a side dish or desert, and a healthy appetite to the December meeting since there's no bowl show again till January.

As far as Special Activities go, the Fall auction was very successful, from what I hear. Unfortunately I couldn't make it. Thanks to everyone that helped out by auctioning, running fish, selling raffle tickets, and helping out in the kitchen.

## **October Bowl Show:**

### Arts & Crafts

1st - Megan Archer  
2nd - Megan Archer  
3rd - Megan Archer

### All Other Old World Cichlids

1st - Wayne Toven

### **How the Point System works:**

1st - 4 points  
2nd - 2 points  
3rd - 1 point  
1 point per entry,  
maximum 10 points per class

## **November Bowl Show:**

### All Other Livebearers

1st - Dave Williamson  
2nd - Dave Williamson  
3rd - Dave Williamson

*Gambusia regani*  
*Brachyraphis roseni* male  
*Brachyraphis roseni* female

### All Other Egglayers

1st - Wayne Toven  
2nd - Dave Williamson

*Pantanodon buchholzi*  
Peacock Gudgeon

### All Other Catfish

1st - Wayne Toven

*Tatia perugiae*

## Totals for the Year:

Entrant	Total
Wayne Toven	121
Jeff Plazak	71
Dave Williamson	26
Bill Koleszar	11
Megan Archer	10
Nicole Schmid	9
Rich Serva	7
Frank Mueller	4
Bob Miller	3
Nick Rezac	1
Jeff Pletcher	1



**WET PETS PLUS**  
**THE AQUARIUM STORE**  
*"We Are The Saltwater Specialists"*

**Call 330-966-8265**

*Monday-Friday 11-8,  
Saturday 10-7, Sunday Noon-5*

6989 Whipple Ave. NW      Tank Maintenance  
CANTON, OHIO 44079      Available

**Since 1981**



**745-3059**

*Large Selection of:*  
TROPICAL FISH    BIRDS  
SMALL ANIMALS  
REPTILES          AMPHIBIANS  
DOG & PET SUPPLIES

Tues-Fri 12-7      Sat: 10-6  
196 2nd St., NW      (Downtown Barborton)

## 2009 Bowl Show Schedule

### January:

Goldfish, Male Guppies,  
Minnows Danios & Rasboras

### February:

Suckermouth Catfish,  
Swordtails, Characins

### March:

Barbs, Mollies,  
Corydoras Aspidoras & Brochis

### April:

Female Guppies, Platies,  
Aquatic Invertebrates

### May:

Goodeids, Rift Lake Cichlids,  
Aquatic Plants

### June:

Native Fish, Rainbowfish,  
Male Bettas

### July:

Synodontis Catfish, Killifish,  
Angelfish & Discus

### August:

AO New World Cichlids,  
Amphibians, Bog Plants

### September:

Gouramis & Anabantoids,  
Sharks & Loaches,  
Photography

### October:

Arts & Crafts, Marine Fish,  
All Other Old World Cichlids

### November:

All Other Livebearers,  
All Other Egglayers,  
All Other Catfish

# BAP/HAP Report

Wayne Toven



IT'S ALL OVER!!! The 2008 **BAP/HAP** year that is, in December the slate is wiped clean and we are starting fresh for 2009. But back to this year, the club had a second member reach the 10 spawn level; a 16 oz. can of brine shrimp eggs will be awarded at the December meeting / Christmas party to Wayne Toven. We still have plenty of cans of brine shrimp eggs left, let's all work to see if we can award more next year than we did this year. The participation in the Breeder Award and Horticulturist Award programs was an improvement over last year, that's a step in the right direction, but we need to keep it going that way. The club had 14 members participate in the programs, with a total of 56 spawns turned in and 27 horticultural submissions. Our **Breeder of the Year** is *Dave Williamson* and our **Aquatic Horticulturist of the Year** is *Wayne Toven*.

The Greater Akron Aquarium Society is starting a new award to the guardians of the fishes and plants of the aquarium hobby, the **Centurion Award**; they will be presented to members for each 100 spawns in the Breeder Award Program or 100 submissions for the Horticultural Award Program. The recipients for this year will be as follows:

**Dan McMonigle – HAP 100, Rich Serva – BAP 100, Wayne Toven – BAP 100, Wayne Toven – HAP 200, Bud & Cathy White – BAP 200, and Dave Williamson – BAP 200.** Congratulations to all, keep up the good work!!

## October 2008

<u>Species</u>	<u>Common name</u>	<u>Class</u>	<u>Points</u>
<b>BAP</b>			
Jeff Pletcher			
<i>Labidochromis caeruleus</i>	Electric yellow	Cichlid m.b.	15
Wayne Toven			
<i>Xenotoca variata</i>	Jeweled goodeid	Livebearer	10
<i>Xiphophorus xiphidium</i>	Spike tail platy	Livebearer	5
Dave Williamson			
<i>Cryptoheros cutteri</i>	Cutter's cichlid	Cichlid s.s.	5



**November 2008**

<b>Species</b>	<b>Common name</b>	<b>Class</b>	<b>Points</b>
----------------	--------------------	--------------	---------------

**BAP**

Tod Mayo

<i>Labeotropheus trewavasae</i>	Marmalade cats	Cichlid m.b.	15
<i>Sciaenochromis fryeri</i>	Electric blue	Cichlid m.b.	10

Joe Reich

<i>Palaemonetes paludosus</i>	Ghost shrimp	Aquatic animal	10
-------------------------------	--------------	----------------	----

Wayne Toven

<i>Girardinus metallicus</i>	Black belly metallic topminnow	livebearer	5
<i>Cichlasoma myrnae</i>	Topaz cichlid	Cichlid s.s.	5

Dave Williamson

<i>Hyphessobrycon colombianus</i>	Col.red tail tetra	Tetras	10
<i>Allodontichthys hubbsi</i>	whitepatched darter	goodeid livebearer	10

**HAP**

Dan McMonigle

<i>Ceratopteris thalictroides</i>	Water sprite	A	5
<i>Lemna trisulca</i>	Ivy leaf duckweed	A	5

Wayne Toven

<i>Microsorium pteropus</i>	Java fern var. narrow leaf	D	20
-----------------------------	----------------------------	---	----

**2008Spawn & Point Totals**

	<b>BAP</b>	<b>Points</b>	<b>HAP</b>	<b>Points</b>
Dave Williamson	13	130	1	10
Wayne Toven	10	75	20	240
Rich Serva	7	65		
Bud & Cathy White	6	55	1	20
Joe Reich	5	60		
Todd Mayo	5	55		
David Girard	3	35		
Christina & Bud Biederman	2	30		
Frank Callesen	2	10		
Phil & Tiffany Hypes	2	15		
Jeff Pletcher	2	25		
Bob Miller	1	15		
Dan McMonigle	4	30		
Nick Rezac	1	5		

# Meeting Notice

**Thursday, December 4, 2008**

**Program: Christmas Party!!!**

There is a lot happening this meeting:

**Christmas Fish give-away**, Huge Pot-Luck Dinner (bring a side-dish or dessert) **Fishy Gift Exchange** (anything you think a fish-head would like, bring a wrapped gift and take a different one home - \$20 limit) **Annual Losers Raffle** (get tickets 1 for 10 of your losers from this year, no tickets are sold at this meeting), **Growth Program Judging** (don't forget your gold barbs!) and **Annual Awards!**

**Bowl Show:** None, just come and enjoy



**Thursday, January 8 (?)**

**Program:** Rich Serva, CICHAZ &  
Swordtails galore!

**Bowl Show:** Goldfish, Male Guppies,  
Minnows Danios & Rasboras

All general meetings begin at 8:00 p.m. at  
the Mogadore Community/Senior Center

# Coming Events

Mark these dates in all those new calendars  
you're going to get for Christmas so you don't  
miss anything!

**March 1, 2009** – Greater Akron Aquarium Society  
Spring Auction

**July 11 & 12** – Greater Akron Aquarium Society -  
Ultra-Aqua 2009 Show and Auction  
(Note special date!)

**November 1, 2009** – Greater Akron Aquarium  
Society – Fall Auction

All of the above functions will be held at the  
Tallmadge Community Center.



## THE FISH PLACE

141 Robinson St.  
North Tonawanda, NY 14120  
(716) 693-4411

**"Largest Selection of Fish and  
Plants in Western New York"**

Store Hours:  
Mon.-Fri. 12-9 Sat. 10-6 Sun. 11-5

**Over 300 display tanks,  
Specializing in those "Hard to  
Find" species with the best  
prices on the East Coast**



two turtles pet center  
highland square  
760 w.market  
akron, ohio 44303

mon-fri 10-7  
sat. 10-6  
sun 12-5 (330) 374-6765

# Exchange Report

Wayne Toven



Hello club members. If you are interested in reading any of the articles I review, let me know and I will get a copy of it to you, hard copy or e-mail.

**Michiana Aquarium Society**, Michiana Tropical Times: Sept 08  
*Worms, Worms, Worms, Improving Your Fish Feeding with Sawdust and Oatmeal Through Care and Propagation of Grindal Worms, Vinegar eels, and Microworms*, by Richard Eberly

**Hamilton & District Aquarium Society**: Sept 08  
*Spawning the Celestial Pearl Danio*, by Charles Drew  
*Metriclima hajomaylandi and prysonotus*, by Larry Johnson

**Youngstown Area Tropical Fish Society**, the Youngstown Aquarist: Nov/Dec 08  
*Aplocheilichthys lineatus (Golden Wonder)*, by Brian LaNeve  
*My Favorite Annuals*, by Curt Smith

**Ohio Cichlid Association**, Buckeye Bulletin: Oct 08  
*The Cleveland Aquarium, Beginning to End - Part I*, edited by Richard M. Segedi

**Greater Pittsburgh Aquarium Society Inc.**, Finformation: Sept 08  
*Tanichthys albonubes (White Cloud Mountain Minnows)*, by Stan Chechak  
*Aphyosemion pascheni festivum 'Nkolbonda HLM99/2'*, by Eric Bodrock

**Eastern Iowa Aquarium Association**, Fin Flap: Oct 08  
*So You Want a Planted Aquarium - part 2: Lighting*, by Joy Twentyman-Crock

**Durham Region Aquarium Society**, Tank Talk: Sept 08  
*Cryptic Emersion - part 3*, by Derek P. S. Tustin  
*My Green Wet Thumb - Summer Flowers*, by Derek P. S. Tustin

**Durham Region Aquarium Society**, Tank Talk: Oct 08  
*Cryptic Emersion - part 4*, by Derek P. S. Tustin  
*My Green Wet Thumb - Going Topless*, by Derek P. S. Tustin

**St. Catharines & Area Aquarium Society**, the Scat: Oct 08  
*Microworm Cultures*, by Ken Secord

**Durham Region Aquarium Society**, Tank Talk: Nov 08

*Cryptic Emersion – part 5*, by Derek P. S. Tustin

*An Excellent Tropheus Companion, Simochromis babaulti*, by Klaus Steinhaus

*What I (Accidentally) Did This Summer*, by Derek P. S. Tustin

**Kitchener & Waterloo Aquarium Society**, Fins & Tales: Nov 08

*Dwarf Corys – Corydoras habrosus & Corydoras pygmaeus*, by Stephen Crawford

*So You Want a Show Tank?*, by Phil Maznyk

*Breeding Rineloricaria eigenmanni (Common Whiptail Catfish)*, by Kevin Reimer

**Missouri Aquarium Society Inc.**, the Darter: Sept/Oct 08

*Seeking and Finding Lake Victoria Cichlids – part 2: Where is Lake Nawam-pasa and is That Cichlid Really “Extinct in the Wild?”* by Lawrence Kent

*The Rejuvenating Herb*, by Derek Walker

*Aquarium Tech Tips, Correcting for Missed Water Changes*, by Andy Walker

*Types of Algae in the Aquarium*, by Harold Walker

*Enhancing the Appearance of Taxiphyllum barbieri*, by Andy Walker

**Sarnia Aquarium Society**, Aqua Antics: Oct 08

*Hygrophila corymbosa*, by Lisa boorman

*Breeding Paralabidochromis Sp. Rock Kribs*, by Wayne Cole

**Sarnia Aquarium Society**, Aqua Antics: Nov 08

*Silver Tip Tetras*, by Jack VanderAa

*Rotala micranda*, by Lisa Boorman

*Breeding Copadichromis mloto*, by Wayne Cole

**Greater Pittsburgh Aquarium Society Inc.** Finformation: Oct 08

*Brachydanio rerio (Zebra Danio)*, by Stan Chechak

**Pacific Coast Cichlid Association**, Cichlidae Communique: Sept/Oct 08

*First Time Breeding the Sciaenochromis fryeri (Electric Blue)*, by Richard Kong & Brandon Kong

**Southwestern Michigan Aquarium Society**, Swam: Nov/Dec 08

*The Rosy Cichlid Cryptoheros panamensis*, by Chase Klinesteker

*Own Clone: the Marble Crayfish*, by Chase Klinesteker

*Let George Do It – First (Spawn Sturisoma festivum)*, by Charlie Grimes

*Puntius narayani*, by Chase Klinesteker

**Eastern Iowa Aquarium Association**, Fin Flap: Nov 08

*So You Want a Planted Aquarium? Part 3 – Nutrients*, by Joy Twentyman-Crock

**Greater Detroit Aquarium Society**, Tropic Tank Talk: Nov 08

*A Bluenose Shiner Success*, by Philip Kukulski

# Basic Aquarium Photography

Bob Miller



Most of us will find that as time goes on we will eventually want to photograph our fish. And why not ? We have spent time and money to get the tank or the fish to a certain level where the tank is landscaped nicely or the fish are a certain size or are spawning and we want to capture that moment. The problem is... how to take photographs that we can enlarge and hang on the

wall for all to see what we have accomplished. Most of us find that this is not easy to do. In fact, it takes equally as much patience and practice as keeping the aquarium itself.

Often the low light conditions in the aquarium, the reflections from the glass and the constant movement of the fish themselves require some planning, understanding of your equipment and a large amount of luck. Having the best equipment does not guarantee the best photographs. The most important thing you can do is to thoroughly read the manual that came with your camera and become familiar with all of the adjustments, dials and knobs. I, personally make it a habit to always have the manual with me for whatever equipment I happen to be using.

Before even starting to take pictures there is some preparation needed. Thorough aquarium maintenance a couple of days ahead of time, clean the gravel, partial water change, especially if the water is yellow or discolored. Clean the front glass, inside and out. A dark background is preferable as it absorbs light and helps reduce reflection. Don't worry about algae growth on the back or sides as this should be out of focus and dark in the photograph. You will also find that plants, rocks and driftwood also will absorb light and reduce glare as opposed to a bare tank.

The type of lighting used will depend on several factors; amount of natural light available or the aquarium light used. If the light is insufficient you will need additional light, typically in the form of flash. The camera may be mounted on a tripod or you may want it free so you can chase the fish around the aquarium. I have used both methods for

different situations.

Decide what mode you will take the photos in. Beginner's or those new to their cameras may want to use the "auto" mode, while more experienced photographers can experiment with manual modes, which allows for altering fields of focus, lighting, and special features. When I'm taking aquarium shots, I will vary the shutter speed and aperture of the camera to allow for manual control of depth of field and light allowed into the lens. Be sure to thoroughly read through the manufacturer's operation manuals to understand how your camera works. It's important to understand the relationships between aperture, shutter speed, and film speed. Whether you are using film or digital these basic principals of light and photography still apply.

Experiment with different shutter, film speed and aperture settings. Record your settings so that you can see what effects were caused by various exposures and will be able to duplicate those you determine you like. With digital images that information is typically stored in the Metadata of the image. You can view that data with many of the graphics programs.

Find the aquarium "sweet spots", which are openings, and areas where the fish like to swim or hover. Try employing some of the above techniques, and hopefully the advice will improve your results

## **Equipment**

The camera itself does the bulk of the physical work so it's important to choose one that's right for you. Today the choices are primarily digital. You have many models from which to choose. Remember that the most expensive is not necessarily the best. Get equipment that feels comfortable to you.

A flash system is also very important due to the nature of the photos. Built-in, and camera mounted flashes are the most common, but there are some excellent backlighting, and slave flashes that make an enormous difference. A quality flash system will prove invaluable for photos. Shadows and glare are common hurdles that can be overcome by manual photography, or a good flash. Shop carefully for the flash system if you plan on using the camera for your aquarium.

A tripod is highly recommended. A sturdy model of quality construction is foremost in consideration. You also want one that is pivotal and allows the camera to be moved into various and sometimes precarious positions. Many are fairly inexpensive, and can be folded up for travel/storage.

Commonly, to avoid flash glare, 35 mm photographers experiment with different lenses, especially those with longer focal length such as 100 or even 200 mm macro lenses. Your choice of the lenses for the camera will be significant in the difference of the photos. If your camera can use multiple lenses you might consider getting a wide angle and/or macro lens. The wide angle lens allows for panoramic shots, and the macro lens is basically a zoom lens that allows for close up shots.

Other photography equipment such as light filters, shutter release cables, lens cleaning kits, and camera maintenance equipment can be very helpful also.

### **Camera Equipment:**

**Flash** Off camera flash with bracket – allows positioning of light overhead or to the side

**Tripods** Good sturdy tripod will help to make your photos crisp and sharp



### **Lenses**

**Macros** Most expensive, best quality image  
50mm to 100mm-can be used in place of normal lens for general shooting  
Close focusing – often 1:1 or closer

**Telephotos** Expensive



100 – 200mm –allows you to zoom in while at a distance to avoid flash glare or spooking nervous fish

***Screw-in, Plus lens' or diopters***

Inexpensive although there may some lack of sharpness – simply screw them on the front of the lens - +1,+2,+3 and some sets will have a +4, add in any combination to achieve close focus.

***Bellows*** More expensive than screw-in lens but generally less expensive than Macro. Rack mount focus gives pin-point control of focus.

***Reversal Rings***

Allows normal lens to be mounted to the camera in reverse. Inexpensive, close focusing, however you lose all auto functions while using the lens.

**Photographic Terms:**

**Shutter Speed**

Shutter speed is determined by the amount of light and the film speed. The faster the film or the greater the amount of light the faster the shutter speed. Faster shutter stops movement. 1/125 sec. is an average shutter speed to stop slow movement. 1/1000 th sec. will stop a hummingbirds wings.

**Aperture / f-Stop**

The aperture is the iris of your lens. It opens larger or smaller to let light in. the larger it is the more light is let in, the faster the shutter speed can be and faster film speed can be used. Aperture also controls “depth of field”. This is the distance in front of and behind the apparent point of focus. Smaller f/stop (f22) greater depth of field.

**ISO/Film speed**

The ISO or “film speed” is a measurement of the sensitivity of the media to light. With film cameras it is the emulsion side of the film. With digital it is the sensitivity of the CCD (charge coupled device) which can be electronically changed.

**Color balance**

“White balance” as it is known on most cameras is a way to adjust your cameras sensitivity to ambient light.

**Don't forget Aquarium Preparation**

Cleaning  
Aquascaping  
Photo-specific tanks

# *Corydoras C89*

Carolyn Hanlon

My acquaintance with Corydoras C89 began in August 2006, when I began looking for a small Cory which was also tolerant of cool water conditions. I obtained the Aqualog book on Corydoras, and started reading the information on sizes and best water temperatures. Then I started looking for the fish on my list. I checked Aquabid and also started looking for them at local auctions.

At the GAAS spring auction in 2007, imagine my surprise that there were Cory C89 fry available, brought by Eric Bodrock of All Oddball Aquatics (thanks Eric!) I made a point of getting a group of 5, and put them into my 30 gallon tank to grow. It soon became apparent that I had 5 males (I have raised corys in the past, and sexing is relatively easy.)

There were none available at the show auction, and I had resigned myself to no girls, when the Akron fall auction (also 2007) rolled around, and Eric brought 2 more lots of Cory C89. I somehow managed to miss the first lot, but made up my mind to be sure to get the second. I did, so now I had a total of 10 of these fish. Bud White looked at them, and agreed with me that I had at least 2 females (yea!) A second opinion is always a good thing. In they went with the others.

Now the waiting began. Corys usually mature fairly rapidly, but these did not seem to. They chased around, and acted like usual corys, but no spawning activity was apparent, until November 2008. I did a 50% water change, and I finally found eggs on the glass. They are now in one of my killie hatching dishes, and I am hoping for the best. Mom and dad(s) are F1 from the wild, so my “kids” will be F2. I have around 20-25 eggs, so I am happy!

Now for the obligatory info: Aqualog says they grow to 5cm females (2”) and 3cm males (a bit over 1”). Well, I agree for males, but females would have to stretch to make 5cm. I would agree to 4cm. There is also a slight color difference (at least in my group) in the males having a sharper striping pattern in front of the dorsal to the head. The female’s color is more blurred.

My 30 gallon tank is VERY heavily planted, with enough Java moss at each end that you cannot see the back glass. The middle has a Madagascar Lace plant and a Crypt Wendtii “mother plant” pot, and there is a very old not very good power filter circulating water. The tank is heated to 70-72 degrees. My water is extremely soft well water (30 – 100 TDS, depending on the season) and neutral. I add ¼ tsp of Equilibrium with

each 7 gallons of water changed, to avoid killing fish. They are fed Aquarian flake, Ocean Nutrition flake, mosquito larvae (in season), frozen blood worms, and left over BBS. The only other fish still alive in the tank (this is my “leftover” tank with the exception of the corys) is a lone male *Epiplatys lamottei* Koule.

Is it possible that they spawned prior to this, and I hadn’t noticed? Yes, if they spawned on the rear glass, I never would have seen the eggs. But these fish were very slow-growing for corys anyway.

My plan is to keep about half the fry, and let the other half go in local auctions. I have had *Cory aeneus*, *Cory paleatus*, *Cory pygmaeus*, *Cory hastatus*, and one of the skunk-striped corys (can’t remember which one), and these are truly my favorite. They are small (fit well with killies and bettas) and are tolerant of cooler water, and extremely attractive. I hope to maintain them for a long time, if the fish are cooperative.



## *A Fairy Tale*

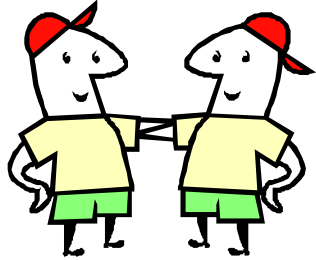
By Unknown

Once upon a time in a faraway place one hot August night at the board of directors meeting of the Greater Acorn Aquarium Society, the lifetime forever president Sonny Black brought the meeting to order. Sonny ruled the society with an iron fist. The only people who dared gave him a hard time were the dreaded Raffle Queen and her sidekick the 50/50 Lady.

Sonny started the meeting by going around the room discussing the just completed Ultra Spectacular fish show and auction. He mentioned how proud he was that everyone did a good job and how smoothly everything went. But everyone in the room could sense that something was bugging Sonny. In a rare compassionate moment, the Raffle Queen spoke up. “What’s wrong Sonny? We just put on one of our better shows. Everybody who was anything in fishland was there. We had Mr. Cichlid with his many tanks of four foot long cichlids. We had Eric the Oddball with his hot girlfriend. We had the Book Maniacs with their thousands of books. Super plant man was there from Indiana with “The Lovely”. We

had great fish, a fantastic auction, great food, good raffle prizes. What more could you want?"

Sonny said "Yes I know we have the best fish club in the nation, and we put on the best show in the country. But there is one thing that really makes me sad. Every year when we put on the fish show, those dastardly Dooman brothers from the Oldstown Aquarium come to town and take all our prize money, trophies, and raffle prizes home with them. To make matters even worse, they do their little dance down the isle and just thumb their noses at us. Something must be done to put a stop to it." Everyone in the room agreed that a more evil pair did not exist in all of fishland.



Mr. Scrooge, the tightwad treasurer, suggested that we could send them a special show flier with a different show date than the real show. They would show and nobody would be there. But that idea got voted down as a bad idea. Then the smooth talking handsome vice-president said that he heard a rumor from the Super Plant Man that the Dooman brothers were really Canadians. Sonny said I always suspected that they were aliens, but I thought that they were space aliens; my biggest fear was that one day 50 of them would show up instead of just two. Sonny thought for a while then he said, "I got a plan. Listen up everyone here is what we are going to do."



"Next year we lure them to our show with the promise of good prize money and great raffle prizes. We take their registration money and let them spend thousands of dollars on raffle tickets. Then just before the prize money is handed out and the raffle tickets are picked, we call the Immigration Authorities. We can sit back and watch them make a mad dash for their green pickup truck and head straight for the border. After this, we all have a good laugh."

"We keep all the prize money and give the raffle prizes to more deserving people. We sell all their fish to WAL-MART. By this time next year there will be peace in fishland, and the evil Dooman's will be living deep in the backwoods of Canada trapping Beaver for a living, wondering what went wrong."



Will good triumph over evil, or will the good folk of The Greater Acorn Aquarium Society be foiled again by the obnoxious Dooman brothers? Looks like we will have to wait till this time next year to find out.

# Going Mad With *Aponogeton madagascariensis*

Wayne Toven

Over my many years of fish keeping I have also kept live plants, one of the oddest but neatest looking is the *Aponogeton madagascariensis*, commonly known as the Madagascar lace leaf. In case you are not familiar with its origin; it comes to us from the island of Madagascar, off of the east coast of Africa. In the wild *A. madagascariensis* grows in fast flowing shaded streams and rivers with cool clear shallow water, over a substrate of coarse sand rich in loam mixed with large stones.

The lace leaf grows from a round or oblong tuber that can vary in size from 2.5 cm to 10 cm long. A common mistake made by many aquarists is they think the plant does not need a rich soil to thrive. A mature plant will grow and produce new leaves and flowers when planted in clean washed sand without additional nourishment, due to the fact that it is living off of the nutrients stored in the starchy tuber. The tuber can maintain the plant for 4 – 8 months with only a small amount of nutrient that it gets from the water. Eventually all the nutrients in the tuber will be used up and the plant will probably die, the tuber is often shrunken and rotting. *Aponogeton* species go through a natural cycle during which is a period of vegetative growth, a flowering period, the development of seeds, a build up of nutritional reserves in the tuber, and finally a rest period. During the rest period of up to 3 months, (winter) the temperatures drop to mid to low 50 degrees F, the plant will drop all of its leaves and go dormant, when spring arrives the temperature rises back to the mid to high 60's, new leaves start to grow and the cycle is on for another year.

The most unique feature of the plant is the leaf structure, there is no tissue between the cross veins, giving the leaf a lace like appearance, thus the common name. The leaf blades are oval elliptical, they can grow to 60 cm long by 1.5 – 16 cm wide, for those that are not familiar with metric measurement that is 24 inches long by just over 6 inches wide. Currently there are three varieties of cultivated *A. madagascariensis* for aquarium use. Variety *madagascar* is a narrow leaf type in which the leaf tissue is not entirely absent, and the cavities have a rounded shape. Variety *henkelianus* and variety *major* are wide leaved forms in which the leaves do not have tissue between the veins, and the cavities having a rectangular shape. The main difference between the two is: var. *major* has a consistent vein lattice appearance, while var. *henkelianus* has irregular vein lattice due to transversal veins.

The two plants I have now are both potted in a mixture of potting soil and sand, the roots are buried in the soil, and the tuber is right at the surface of the soil mix, covered with a layer of gravel to keep the fish from stirring up the dirt. Both are in outdoor 110 gallon tubs with water lilies for some shade, and a variety of pond and aquarium plants, that receive 12 – 14 hours of sunlight per day. The row of ten tubs is unfiltered, so there is no water movement, but they seem to be growing well anyway. All the tubs have fish in them, mostly livebearers, but a couple has barbs, one has rainbows - *Glossolepis incisus*, and one has cichlids - *Geophagus red bahia*. Most of the fish have spawned, I think all of the livebearers have, not sure about the barbs, rainbows, and cichlids, there are so many plants to hide in and around, and tubs are black so it is hard to see small fish unless they come to the surface when I feed them.

The plants were put in the tubs in June and by late July they have both flowered; the plant grows a stem from the tuber until it breaks the surface of the water, it has a sheathed tip that opens a day after it emerges from the water, the inflorescence has flower spikes varying in number from 2 – 5. Mine have only ever had two flower spikes, the flower spikes are about  $\frac{3}{4}$  of an inch long when the sheath first opens, and they have a pale purple stalk with a pointed tip covered in small white flowers. The stem tries to hold the spikes up out of the water, sometimes getting an assist from a lily pad, the spikes grow to  $2\frac{1}{2}$  - 3 inches long, if they get pollinated by me or by bugs the flowers start to turn pinkish purple, as the seeds start to develop they turn green, and as the seeds mature they turn a deep reddish color. By the way the flowers are self pollinating that means they can be pollinated with their own pollen or pollen from another *Aponogeton*, so be careful if you are keeping more than one species, they can hybridize. If they do not get pollinated the flower dries up and the stem rots off the plant. The whole flowering process from sheath to mature seeds takes about two weeks, more or less. When the seeds start to fall off the inflorescence, they are encased in a follicle filled with air so that they float which disperses the seeds, in a day the follicle splits open and the less than  $\frac{1}{4}$  inch long green seed sink to the bottom. The seeds begin to sprout almost immediately a single leaf starts to grow, then roots start to grow so it can take hold. I'm sure I left some seeds in the tub because when I first saw them they were everywhere, lots of them. I put some seeds in a container with dirt in another one of my in-ground ponds, and I brought some seeds into the house and left them in just water, to see which does better. One of the books I read said that the young plantlets develop best when left in just water for 4 – 6 weeks, and from what I have observed I think the book was right. The seeds I put in soil in the pond don't look any bigger than when I put them there, just little green specks. The seeds I have in water sitting in a southwestern facing window are growing well, there are so many plantlets that I can hardly tell if they each only have one leaf or more than one, but those leaves are over

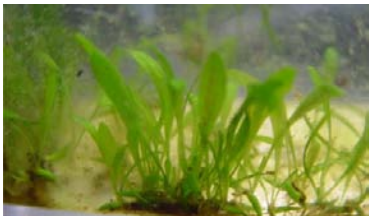
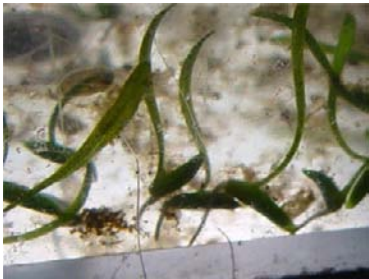
an inch tall, they all have roots, and they are only 21 days old. Since the first seeds dropped both plants have flowered again, and I collected the seeds and brought them inside, they are in just water and again sprouted almost immediately, again. Now both plants have two inflorescences each, and I have been pollinating them, in case the bugs are not doing their job. The plants must be gearing up for fall, seeing how many seeds they can produce, they just don't want to quit, I think they are trying to drive me mad! If anybody is in need of young lace plants see me I should have plenty if things keep going as they are.

References:

**Aquarium Plants, Their Identification, Cultivation, and Ecology**  
By Dr. Karel Rataj & Thomas Horemán

**Aquarium Plants**  
By Christel Kasselmann

Photos Below:	
Bud	Sprouted Seeds
Bloom	Seedlings
Seed Pods	Looking like Laceplants





# *Toledo Zoo Trip*



Behind the  
scenes tour







From the fantastic  
amphibian  
collection to the  
rose garden to the



free-flight aviaries and elephant  
feeding time to, oh yeah, fish!  
All in all a great day,



can't wait for  
the next trip,  
Bye!



# Swap Meet

Welcome to our Aquatic Classifieds - a place where you can list fish and aquatic items that you would like to sell or trade or are interested in buy or trading for. There are a few simple rules to prevent problems and abuses of the system:

1. You must be a members of GAAS to list either Haves or Wants.
2. No retail or commercial sales establishments will be permitted to list.
3. Only hobby related items will be listed.
4. Ads are limited to six items only and may only be run for three issues of Tank Topics. (You must give the Editor notice before the publication deadline to have an ad re-run!)

**HAVE:** Plumetail Platies, Crown-tail and Lyretail Platies, Hifin Variatus, Hifin/Plumetail Platies, *Zoogoneticus tequila*, *Xiphoporus montezumae*, *Xiphoporus nezahualcoyotl*, Hifin Black Swordtails

**Want:** *Girardinichthys multiradiatus*, Half Beak livebearers

See pictures of my fish at  
[www.platy-plus.com](http://www.platy-plus.com)

**Rick Graham:**  
[platyplus@neo.rr.com](mailto:platyplus@neo.rr.com)

## W. E. T. FISH BAGS

	50	100
3 1/2 x 12	\$2.50	\$4.00
6x14	\$3.00	\$5.00
6x18	\$3.50	\$6.00
8x20	\$4.00	\$7.00
10x24	\$4.50	\$8.00
3 1/2- 1.5 mil	All others - 2 mil	

**Wayne Toven** (330) 296-6322  
or [wtoven@hotmail.com](mailto:wtoven@hotmail.com)

## For Sale:

29G Tank and Stand Includes Hood, Flora-glow lamp, filter, heater, background, tank divider and decorative rocks.

\$200 obo

Looking for 10G tank Stand.  
Paul @ 216-338-2995 or

[pnaxer@gmail.com](mailto:pnaxer@gmail.com)

We're still in the hobby, we just have no room for a 3rd tank!

**Have:** 5 zinc coated farm stock tanks - 250 to 300 gallons - in good shape \$40 each, must take all

**Francis**  
330 798-9939

[gardendesigns@nevereveryordinary.com](mailto:gardendesigns@nevereveryordinary.com)

# The Greater Akron Aquarium Society

## Membership Form

☐ New ☐ Renewal

Adult (18 years and older)	1 year \$7.50
	2 years \$12.00
Family (includes children under 10)	1 year \$10.00
	2 years 15.00
Junior (10-17 years)	1 year \$5.00
	2 years \$7.00



Dues Collected \_\_\_\_\_ Date Received \_\_\_\_\_

Name \_\_\_\_\_ Age \_\_\_\_\_

Address \_\_\_\_\_

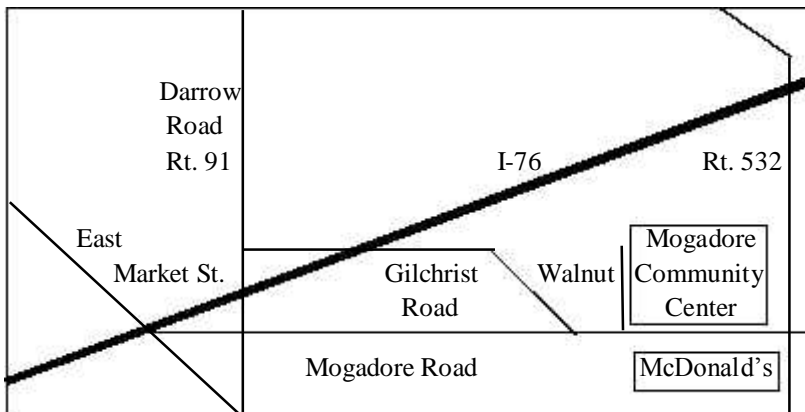
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ email \_\_\_\_\_

How did you find out about GAAS? \_\_\_\_\_

Memberships are due one year from the date of joining. Completed membership forms can be turned in at a meeting or mailed to the membership chairman at this address:

GAAS Membership Chairman, P.O. Box 494, Akron, OH 44309-0494



The Greater Akron Aquarium Society  
P.O. Box 494  
Akron, OH 44309-0494

**Meeting Notice - Do Not Delay**