



## The Greater Akron Aquarium Society

# Tank Topics

March/April 2014

### Inside this issue:

President's Message Bud White	3
Editor's Message Dave Williamson	3
BAP/HAP Wayne Toven	4
Bowl Show Don Youngkin	5
Exchange Review Wayne Toven	6
<i>Ancistrus temnickii</i> Joe Reich	7
Cryptocorynes Wayne Toven	9
Meeting Notice	10
Coming Events	10



### 2014 GAAS Board of Directors

President.....	Bud White .....	(330) 848-3856/bud@gaas-fish.net
Vice President.....	Jeff Plazak .....	(330) 854-5257/jeff@gaas-fish.net
Treasurer .....	Rich Serva .....	(330) 650-4613/rich@gaas-fish.net
Secretary.....	Dave Girard .....	girarddavid@live.com
Editor.....	Dave Williamson .....	davew@gaas-fish.net
Special Activities .....	Don Youngkin .....	dyoungkin@neo.rr.com
BAP/HAP .....	Wayne Toven.....	(330) 256-7836/wayne@gaas-fish.net
Membership .....	Bill Schake .....	majorbill@att.net
Raffle.....	Phil & Tiffany Hypes .....	(330) 327-6316/phil@gaas-fish.net
Historian.....	Russ Kirkendall.....	rkirkendall2@neo.rr.com
FAAS Rep .....	Ken McGill .....	(419) 677-3405/ken@gaas-fish.net
Refreshments .....	Bill & Linda Koleszar.....	(330) 626-5660
Publicity.....	Bob Miller.....	(330) 928-6028/bob@gaas-fish.net
Program .....	Dan McMonigle.....	(440) 476-4663/danm@gaas-fish.net

### Important Dates for 2014

March 2  
Spring auction

June 21 & 22  
Ultra Aqua 2014

November 2  
Fall auction

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

## 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. Visitors are always welcome, it costs absolutely nothing to attend a meeting and look us over.

**MEMBERSHIP:** The cost is only \$10 for adults, 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 others that share your interests, a subscription to our bi-monthly magazine 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 raffle.

**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.

**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 during the summer 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 [dwilliamson223@hotmail.com](mailto:dwilliamson223@hotmail.com)

### The Greater Akron Aquarium Society Membership Form

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

Dues are for 1 year or 2 years if  
email publications are chosen

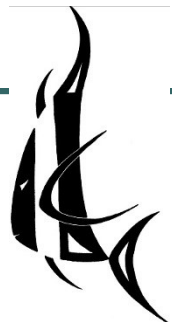
☐ New ☐ Renewal

☐ Electronic ☐ Mail

Adult (18 years and older) & Family  
(includes children under 10) \$10.00

Junior (10-17 years) \$5.00

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





# President's Message

Well hello folks, I missed the meeting but I was in the middle of moving from my old house to my new house. Still am doing that as I type this short message.

NEED TO REMIND EVERYONE THAT THE SPRING AUCTION IS COMING UP SUNDAY MARCH 2ND AND WE WILL

BE SETTING UP SATURDAY MARCH 1ST AT 7 PM. WE NEED HELP BOTH DAYS, SO PLEASE MAKE PLANS TO BE THERE, PREFERABLY BOTH DAYS.

Also bring something to auction off it helps the club plus you get something for your time there!

**See ya soon  
Bud White**



# Editor's Message

**Dave Williamson**

Well here we are again, Spring Auction season again. Ours is coming up very soon (March 2nd) which will fall before the meeting so hopefully you receive this in time. As usual, we have the ability to get into the hall the night before to set up tables, chairs and so on to make the morning a little less hectic. So if you're able drop by the Tallmadge Community Center around 7 pm on March 1st and we'll get it done in record time. Then the next day come back to unload those fish you've bred over the winter and pick up some new stuff to work with. That's how us BAP sluts roll! Oh, and don't forget that just because our auction will be over there is nothing to do in the fish hobby, there will be plenty of others you can attend with a short drive. Checking out other club's auctions is also a great way to pick up fish and plant species that may be new to your area. It's surprising the different stuff you'll find with just a couple hour trip.

Now the big news: I had mentioned in the last issue that we were going to do some work on our mailing list as well as our membership dues. Well, you'll notice we've made a change in the cost as well as offering double the length of time if you are willing to receive your publications via email. This doesn't only benefit the club by saving postage costs but you get color pictures and don't have to wait for the post office to deliver it (and not mangle it in the process!) So there you have it, see it's not that painful after all (better than that root canal!) As part of that same subject, You'll notice (if your membership was expired that is) that there was a

reminder inside this issue. Due to some record keeping issues, there is the possibility that someone may have renewed and it wasn't recorded. If you feel that was the case let me or our membership chairman, Bill know and we'll get everything situated properly. It's always easier to keep things from getting mixed up than to fix them later, but what ya gonna do? It's still better to fix them than not. Another thing we're going to do is to contact all the life members and double check with them that they are still interested in seeing what's going on in the hobby even though they may not be active in it anymore.

Well I have to say I got some results to my asking for articles in the last issue. It's pretty obvious or I wouldn't have had anything to put in this one! That doesn't get you off the hook though, you'll notice that there are two articles here. Guess how many I got? Yep, two. So in other words that means we still need interesting and informative content for the next issue. I know you can do it, I have faith! Just like I know this blasted winter will be over and it will get warm again and I won't be braving below zero wind chills to walk the dogs! Seriously, we'd love to hear all about what your fish are doing!

On a personal note the April meeting will mark 33 years I've been a member of GAAS (if that doesn't make me feel old. . .) but I'm planning to see you at the meeting! (and the Spring Auction!)





## BAP/HAP Report

Wayne Toven

All right it's a new year, hope everyone had a safe New Years party or whatever you did. It's cold outside, so I have done lots of looking out the window and thinking "glad I don't have to go anywhere." That stupid little rodent Punxsutawney Phil said we are in for 6 more weeks of winter, I'm sure hoping he's wrong. The BAP/HAP slate got wiped clean for December, but no surprise nothing got turned in, in January we started off even up, 2 spawns and two plant flowerings submitted. However one of the spawns ( *Corydoras aeneus* ) resulted in a Master Breeder Catfish plaque to be presented to Dave Williamson, congratulations Dave another plaque to add to the wall of fame. After the bad news from Phil, we had the February meeting, where we had 4 spawns turned in and one of those ( *Ancistrus temminckii* ) resulted in a Master Breeder Catfish plaque that will be awarded to Joe Reich, congratulations Joe!! Wow two months in a row of members earning a Breeder Award plaque, see you do get recognition for spawning fish. We should have more coming soon; with all the cold weather extra time should be spent in what is usually the warmest room in the house, the fish room. Now with the spring auctions starting there will be lots of opportunities to get some new young fish or adult breeders, to work with, or more tanks and equipment to set up so you can get more fish, this sounds like the beginning of a vicious cycle. Back to business, all current members are eligible to participate in

either or both of the Breeder Award Program or the Horticultural Award Program. If you need a copy of the rules and forms for either, you can download them off of the club's web site, or get copies from me at a meeting. Don't forget our auction (usually one of, if not the largest, in northeast Ohio) coming before you know it on Sunday March 2<sup>nd</sup>, registration starts at 10 am and the auction starts at 11 am until we are finished. So bring your money and get some great deals on anything hobby related.

### January 2014

#### BAP

Species	Common name	Class	Points
Wayne Toven			
<i>Limia zonata</i>	Striped Limia	Livebearer	5
Dave Williamson			
<i>Corydoras aeneus</i>	Albino aeneus	Catfish	20
HAP			
Wayne Toven			
<i>Tulbaghia violacea</i>	Society garlic	E – flowering	10
<i>Colocasia esculenta</i>	Mojito Taro	E – flowering	10

### February 2014

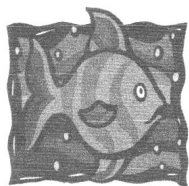
#### BAP

Joe Reich			
<i>Ancistrus temminckii</i>	Bristlenose pleco	Catfish	20
<i>Cryptoheros panamensis</i>	Panama cichlid	Cichlid Substrate	5
Wayne Toven			
<i>Heterandria formosa</i>	Least killifish	Livebearer	5
Dave Williamson			
<i>Oryzias woworae</i>	Neon blue rice fish	All other species	5

2014 Totals	BAP	Points	HAP	Points
Joe Reich	2	25	-	-
Wayne Toven	2	10	2	20
Dave Williamson	1	20	-	-

### KEN'S FISH

HOME OF QUALITY TROPICAL  
FISH FOOD AND SUPPLIES



KEN MENARD (508) 823-4043  
32 4TH Ave. Taunton, MA 02780  
[www.kensfish.com](http://www.kensfish.com)  
[KENM333@COMCAST.NET](mailto:KENM333@COMCAST.NET)



# Bowl Show & Special Activities

Don Youngkin



With the new year, the bowl show competition has begun again. So far this year, we have had only 2 individuals competing. All are welcome to join the fun and bring in entries.

## January

### Goldfish

1<sup>st</sup> – Dave Williamson - Shubunkin

2<sup>nd</sup> – Dave Williamson - Ranchu

### Male Guppies

1<sup>st</sup> – Jeff Plazak - Guppy

2<sup>nd</sup> – Jeff Plazak - Guppy

### Minnnows, Danios, & Rasboras

1<sup>st</sup> – Dave Williamson - Brilliant Rasbora

2<sup>nd</sup> – Dave Williamson - Purple Passion

3<sup>rd</sup> – Jeff Plazak - Danio

## February

### Male Betta splendens

1<sup>st</sup> – Jeff Plazak - Betta

### Swordtails

1<sup>st</sup> – Jeff Plazak - Lyretail

2<sup>nd</sup> – Jeff Plazak - Swordtail

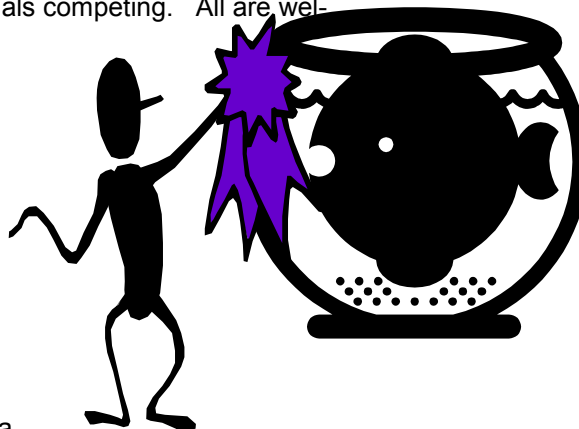
3<sup>rd</sup> – Dave Williamson - Gold male

### Characins (Tetras & Relatives)

1<sup>st</sup> – Dave Williamson - Silvertip Tetra

2<sup>nd</sup> – Dave Williamson - Black Neon

3<sup>rd</sup> – Jeff Plazak - Pristella Tetra



### How the Point System works:

1st - 4 points

2nd - 2 points

3rd - 1 point

1 point per entry,  
maximum 12 points per class

### Annual Point Totals

Jeff Plazak 28

Dave Williamson 27

## 2014 Bowl Show Schedule

### January:

Male Guppies  
Goldfish  
Minnnows, Danios & Rasboras

### February:

Swordtails,  
Male *Betta splendens*,  
Characins (Tetras & relatives)

### March:

Mollies  
Suckermouth Catfish  
Barbs

### April:

Female Guppies  
Corydoras, Aspidoras & Brochis  
Photography

### May:

Rift Lake Cichlids  
Sharks & Loaches  
Aquatic Invertebrates

June: no bowl show

### July

Native Fish  
Angelfish & Discus  
Aquatic Plants

### August:

Platies  
Rainbowfish  
Amphibians

### September:

Goodeids  
AO New World Cichlids  
Bog Plants

### October:

Gouramis & Anabantoids  
AO Old World Cichlids  
Arts & Crafts

### November:

AO Livebearers  
AO Egglayers  
AO Catfish

December: no bowl show

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 Barberton)



Mon-Sat 11-8  
Sunday 11-6

6629 Engle Rd.  
Unit 108  
Middleburg Hts., OH  
(216) 433-1340



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



First of all there was a recent reprint in the **Ohio Cichlid Association's** January 2014 issue of their Buckeye Bulletin of Wayne Toven's article *Keeping & Spawning Cyprichromis leptosoma*.

Second, all the articles mentioned below are original articles by other club's members that I have reviewed, I do not mention reprinted article because I have probably reviewed them in the past. If anyone would like to read one of these articles let me know and I will email you a copy of it or get a hard copy to you at a meeting.

**Eastern Iowa Aquarium Society,** Fin Flap: Jan. 2014

*Lighting Revisions are Positive Steps*, by Gerry Kuhl

**Greater Cincinnati Aquarium Society,** Fincinnati: Jan. / Feb. 2014

*Breeding Nanochromis transvestitus*, by Steve Smith

*Altolamprologus compressiceps "Red Fin"*, by Jerry Riegel

**Kitchener – Waterloo Aquarium Society,** Fins & Tales: Jan. 2014

*Out of Africa – Pelvicachromis*, by Ed Koerner

*Diving into the Killifish Pond – 'Caution Shallow Waters'*, by Karen Murray

*Living With Livebearers – Ilyodons*, by Ed Koerner

*Saltwater Tank Adventure Journal – Part 1: DIY Tank Stand*, by Michael Reiter

*Myths, Mistakes, & Misconceptions at Your Local Fish Store*, by Ed Koerner

**Hamilton & District Aquarium Society:** Jan. 2014

*Spawning Ancistrus aguaboensis*, by Charles Drew

*Apistogramma ataihuaipa – the Sweet Apisto*, by Jessica Bullock

**Pacific Coast Cichlid Association,** Cichlid Blues: Jan. 2014

*Ich*, by Jessie Sanders

**Aquarium Club of Lancaster County,** Tank Tales: Jan. 2014

*Breeding Pelvicachromis taeniatus*, by Gary Haas

**Circle City Aquarium Club,** Fancy Fins: Jan. 2014

*The Planted Aquarium (DIY Co2)*, by

Joe Driskill

*Breeding Skiffia multipunctata*, by Bobby Sutton

*Breeding the Beckford Pencilfish*, by Bill Flowers

**Greater Pittsburgh Aquarium Society Inc.** Finformation: Jan. 2014

*Spawning Badis badis*, by Leslie Ernst

*The Bumblebee Goby, Brachygobius xanthozona, Care and Breeding*, by Scott Garner

*Corydoras melini*, by Charlie Mueller

**Sarnia Aquarium Society,** Aqua Antics: Jan. / Feb. 2014

*Breeding the Beautiful Jewel Cichlid – Hemichromis cristatus*, by Wayne Cole

*Breeding the Tanganyikan Cichlid Neolamprologus falcicula*, by Wayne Cole

*Guianacara spheozona: an Attractive South American Cichlid*, by Wayne Cole

**Kitchener – Waterloo Aquarium Society,** Fins & Tales: Feb. 2014

*Saltwater Tank Adventure Journal Part 2: DIY Water Storage*, by Michael Reiter

*A Mouthful of Controversy*, by Al Ridley

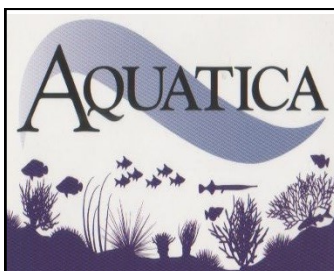
*Out of Africa – Chromidotilapia guentheri guentheri*, by Ed Koerner

**PNT**  
*Aquatics*

Caves, Driftwood, Supplies  
Repashy Superfood

[www.pntaquatics.com](http://www.pntaquatics.com)  
[info@pntaquatics.com](mailto:info@pntaquatics.com)

Hours by appointment only



**AQUARIUM GALLERY**

[aquaticsuperstore.com](http://aquaticsuperstore.com)

330.866.0559

6653 GRAFTON ROAD,  
VALLEY CITY, OHIO 44280

**W. E. T. FISH BAGS**

	50	100
3 1/2 x 12	\$4.00	\$7.00
6x18	\$5.00	\$9.00
8x20	\$6.00	\$11.00
10x24	\$7.50	\$14.00

3 1/2- 1.5 mil All others - 2 mil

**Rubber Bands \$1.00**

**Wayne Toven**  
(330) 256-7836 or  
[wtoven@hotmail.com](mailto:wtoven@hotmail.com)



**ALL ODDBALL AQUATICS**

[SALES@ALLODDBALLAQUATICS.COM](mailto:SALES@ALLODDBALLAQUATICS.COM)  
[www.alloddballaquatics.com](http://www.alloddballaquatics.com)

## *Ancistris temminckii*

Joe Reich



I know, I know, Bristlenose catfish are supposed to be easy to breed! I've been told this a number of times over the years, but for some reason or another, mine never spawned successfully for me...until recently. So most of you hobbyists will probably be bored with this article, but our editor has requested some reading material, and this is about the only thing I have to write about at this time. So here it goes...

I've been keeping this species for about the last 6 years or so. I've had them spawn for me in the past, but it was always in the uplift tube of my sponge filter. Needless to say, the eggs never got fertilized due to the up current of water inside the tube and they would always fungus. Then last summer after a fish auction, I ended up having to move fish to various tanks to make room for my new acquisitions. As it happened I ended up putting an older (one of the first ones that I bought), much bigger female into a tank with a younger and much smaller male. At first it didn't look like

it was going to work out because the female would chase the male away from anywhere that she wanted to go. Inside the tank was a cave made for *Altolamprologus* species, I had a species of cichlid spawn in it earlier in the year. I noticed that the male Bristlenose was hanging out close to the cave and I assumed he was just staying close to get away from the female. After all, it didn't look like she would be able to fit inside. One day the male was "flapping" his ventral fins from the inside of the cave, I had no idea what this was about, but I assumed it was an indication of bad water quality because of feeding the cichlid fry in the tank finely powdered flake food. So I immediately did a partial water change. The next few days the male stayed inside his cave, only poking out once in a while at feeding time. I didn't think anything of this behavior other than he was hiding from the female. Was I ever wrong! One day during feeding time I noticed a tiny pleco near the surface of the tank. I was totally taken away by the sight of all those tiny pleco's

outside the cave, on the tank walls and airline tubing! One BAP coming up! The cichlids didn't even try to eat them! I fished all the fry out and into a 10 gallon for raising, after waiting this long for an "easy" BAP I didn't want to take any chances on losing them.

I have this species in a number of my tanks, and it wasn't long after the first spawn in the 29 gallon, that the male in my 180 gallon started flapping his ventrals also. The 180 tank has one male and two females. Since this tank is located in my kitchen, I pass by it often and get to watch a lot of the aquatic entertainment that this community tank provides. This time the cave the male was flapping next to had the opening facing the front of the tank. I was able to watch the development of the eggs and fry by shining a flashlight inside. I didn't do it too often though, it looked like the male was taking offense to the bright light. I get the impression that this species is somewhat territorial. They seemed to have their "areas" where they would prefer to hang out. Whenever one ventured into the close proximity of another it was chased away. One day while I was passing by I noticed a female approaching the cave and I had already seen the male go inside. I have occasionally seen a female go into it before, so this was nothing new. I thought I would watch to see what would happen. She then entered the cave and the male came out. I thought maybe she chased him out, but he went back inside and they stayed in the cave together. I got out the flashlight and peaked inside thinking that maybe they were fighting and I just wasn't seeing it, but all was tranquil. After about a half hour, I shined the flashlight inside again, and low and behold, there were eggs attached to the roof of the cave. Cool! What happened next also surprised me. The second female approached the cave and went inside. Again I expected some fighting and a quick eviction, but none came. I can't say for absolute certainty that both females spawned because I had to leave for work. But when I got home there were eggs laid in two separate spots with one clutch bigger than the other. So it's possible these fish may be



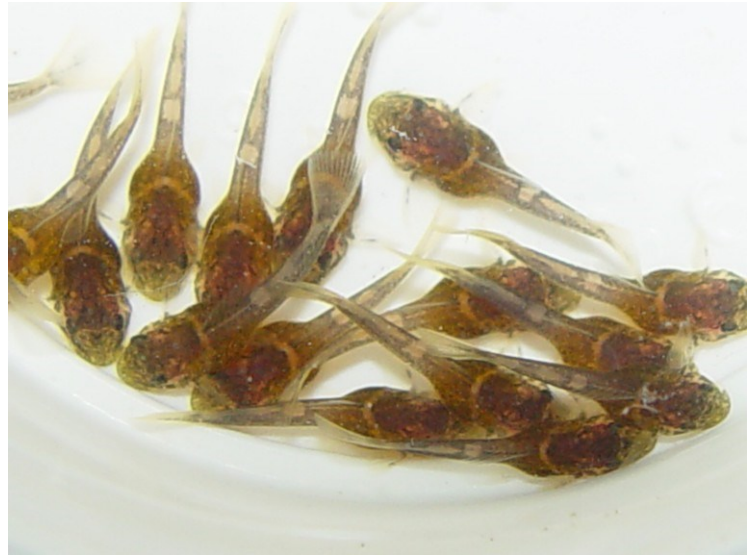
harem spawners.

Every day I would shine my flashlight into the cave and watch the development. The eggs were pretty large, bigger than some of the mouth brooding cichlids that have spawned for me. They were light amber colored and seemed to get just slightly darker as they developed. From spawning day to hatching day, it took five days. After they hatched, they remained attached to the top of the cave where they were laid and they looked like little eggs with a tiny, tiny tail wiggling back and forth. They stayed in this stage for another five days, but each day the yolk sac would get smaller and the tail would get bigger. Their color stayed a light amber color. At day four I noticed that they were starting to move around inside the cave and it looked like they were attaching themselves with their suckermouths. Once they looked like miniature adults bodily, they took on the adults coloration too. The male continued to guard any fry that remained in the cave, he seemed to even herd them away

from the opening. It wasn't until about the fourth day that I noticed that the fry were becoming less and less in numbers. I resolved that when I got home from work that I would fish out the rest. Unfortunately, all I got was six fry from that batch. Oh well, lesson learned! I put that lesson to good use when they spawned again two weeks later. There were less eggs in that spawn, but I sure got more fry than I need!!

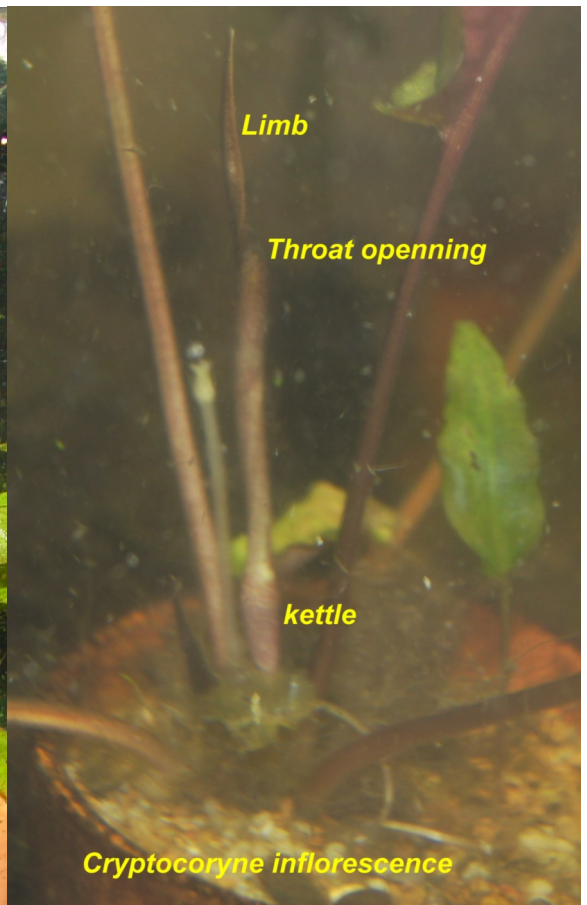
There is one pleco food that I've been feeding them on a supplemental basis. They seem to go after it with much gusto. It's made by sera and called Catfish Chips. I'm not one to jump on the popularity/fad bandwagon, but I'll try new products, and

my Ancistris are telling me that this food is delicious! I also occasionally give them french cut green beans, straight from the can. As well as canned spinach. Any left over food that makes it to the bottom of the tank is cleaned up by the pleco's too, no surprise there. All in all, an easy fish to keep, and now at least I can say that I turned in that BAP too.



**Cryptocoryne wendtii bronze**

**Cryptocoryne cordata**



**Limb**

**Throat opening**

**kettle**

**Cryptocoryne inflorescence**



# Basic Tales of the Crypts

Wayne Toven

I haven't done a plant article for quite a while, so here goes nothing. This will hopefully be an informative account of the plants in the genus *Cryptocoryne*. These are interesting plants that are known as crypts for us lazy people, they are a group of aquatic or amphibious plants that come in quite a variety of sizes, colors, and leaf types. They can be grown in either the submersed (underwater) or emersed (above water) forms, as long as their roots are kept very moist. They were first imported to Europe in 1906, but were not regularly imported until the 1930's. In nature they grow in deeply shaded areas with other low vegetation in the tropical jungles and rainforests of Southeast Asia, India, Southwestern China, Malaysia, and the Asiatic islands of Ceylon, the Philippines, Indonesia, and New Guinea. They have adapted to conditions of slow moving water in marshy areas and shallow brooks to fast moving waters in streams where the water is soft with a neutral Ph.

There are currently around 60 described species of *Cryptocorynes*, but of these only about 15 species are regularly available in the aquarium hobby. Coming from the tropics most crypts like warmer temperatures in a range from 77° - 82° F, but can live in temperatures down around 72° F on the low limit up to around 86° F on the high limit. Needless to say they live but do not thrive in my fish room, as most of my tanks are unheated, and even the ones that are heated are still below the optimum temperature range for growing crypts. If you are keeping crypts they can be grown in flowerpots or planted directly in the substrate of an aquarium, the substrate should be a mixture of coarse sand, loam, fine gravel, and some peat moss, to approximate what they grow in naturally. The substrate should be 3 – 4 inches deep, about the depth that a flower pot would be; it is a good idea to use a liquid fertilizer as they absorb nutrients through

their roots. Speaking of roots, in the aquarium most crypts propagate by runners among the roots, a short upright rhizome on the runner forms a new plant at 1 – 10 cm (1/2 – 4 inch) intervals.

Crypts can be grown submersed in the aquarium, or can be grown emersed in a small aquarium with a tight fitting cover to keep the humidity high. When grown emersed crypts tend to flower much more readily than they would when they are grown submersed, many of the species of crypts can only be positively identified through the process of flowering, due to their resemblance of other crypt species. The flower or inflorescence is not your typical flower, it is a tube shaped structure which varies in size, color, shape, and surface texture, at the top of the tube the opening is called the throat, around the throat is a pointy sometimes curled tip called a limb, at the base of the tube is an oval shaped structure that contains the actual male (stamens) and female (pistils) naughty bits (sex organs). In the wild crypts propagate by runners but can also propagate through a process called anthesis, this occurs during the dry season when the crypts are growing emersed. During the dry season the plants change physically also, they become more like terrestrial plants, their petioles (stems) become sturdier, and the leaves toughen up to withstand growing out of the water since the water is not there to support the plant, but their roots remain moist. The entire process of anthesis consists of the flowering, pollination, and maturation of the fruit (seeds), this process can take from 6 – 9 months. The flower lures small insects into the tube with a sweet odor of carrion, and the limb can close off the top of the inflorescence for up to 3 days to keep the insect trapped to make sure it deposits pollen that it picked up from a previous flower visit onto the receptive pistils (which mature first), then in a day or two the stamens mature so pollen

can be picked up by the fly to take to pollinate another flower.

Crypts are rosette plants, the leaves branch out from a central point, they vary widely in the looks of the leaf blades, the shape can be cordate, elliptical, lanceolate, or ribbon like; the margins can be dentate (serrated), entire (smooth), or undulate (wavy); and the surface can be crispate (smooth), undulate (wavy), or appear to be blistered. The coloration of the top surface of the leaves can vary from shades of green to olive to brownish green; the undersides also vary from green, olive brown, light to dark red, or a deep purple. Red leaf colors intensify when the plants are grown in deep shade, but green is more predominant when grown in plenty of light. The plant also tends to not grow as tall if the light is more intense, so the intensity of the light can affect the height of the plant. Most crypts can be used as middle of the tank plant due to their size but some can grow tall, and a few can stay relatively small.

One drawback of crypts is their tendency to not take too well to being transplanted, they go into a condition called crypt rot or crypt melt, the leaves of the plant seem to rot away when they are moved from one tank to another, when the temperature change is too great, or even when a change in water quality is too drastic. Don't panic, the roots are usually just fine, let the plant alone and it will usually start growing again after a while when everything stabilizes. The main thing to remember is they like warm temperatures, soft neutral Ph water, and not too much light, keep these three items with in reason and you should have good luck with crypts.

## Resources:

Encyclopedia of Water Plants, by Dr. Jiri Stodola

Aquarium Plants – Their Identification, Cultivation, and Ecology, by Dr. Karel Rataj & Thomas J. Horeman

Aquarium Plants, by Christel Kasselmann

## The Greater Akron Aquarium Society

P.O. Box 494  
Akron, OH 44309-0494

Meeting Notice - Do Not Delay

# Meeting Notice

## Thursday, March 6

**Program:** Gary Mendez  
His Fishroom and Breeding Techniques

**Bowl Show:** Mollies,  
Suckermouth Catfish,  
Barbs

## Thursday, April 3

**Program:** Steve Weeks  
(University of Akron)- Temporary Pools  
and Their Inhabitants.

**Bowl Show:** Female Guppies,  
Corydoras, Aspidoras & Brochis Catfish,  
Photography

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

## Coming Events

### March 1, 2014 - Motor City Aquarium Society - Spring Auction

Madison Place, 876 Hor-  
ace Brown Dr., Madison  
Heights, Michigan.

Registration 9:00 to 10:30,  
auction starts at 10:30.

For more information:  
[www.motorcityaquariumsociety.com](http://www.motorcityaquariumsociety.com)

### March 15 — NEO-Fish.com Spring Auction

Pipefitters Union hall, near the  
I-480 and I-77 interchange.

### March 28-30, 2014 – Colum- bus Area Fish Enthusiasts – All Tropical Fish Convention

Courtyard Columbus West,  
2350 Westbelt Dr., Columbus,  
Ohio

For more information:  
[www.columbusfishclub.org](http://www.columbusfishclub.org)

**May 4, 2014 - Greater  
Pittsburgh Aquarium So-  
ciety Inc. Spring Auction**  
North Hampton VFD, Gib-  
sonia, PA 15044 Registration  
will open at 9:30 AM  
and close at 1 PM. Auction  
will start promptly at 11  
AM. [WWW.GPASI.ORG](http://WWW.GPASI.ORG)  
Wally Cox 412-420-7985  
[walmich@verizon.net](mailto:walmich@verizon.net) OR  
Joe Doyle 724-602-7564  
[BrokenBox@gmail.com](mailto:BrokenBox@gmail.com)

### May 15 – 18, 2014 – American Livebearer As- sociation Convention

The Crowne Plaza St. Lou-  
is Airport, St. Louis, MO,  
Hosted by the Missouri  
Aquarium Society (MASI)  
For more information:

[http://  
missouri-aquarium-socie-  
ty.com/  
FishHeads Forum/  
viewforum.php?f=28](http://missouri-aquarium-society.com/FishHeadsForum/viewforum.php?f=28)