



Tank Topics

January 2025

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Another year in the books for The Greater Akron Aquarium Society! While the publications have been slow we have continued to host monthly meetings at the Richie Memorial Shelter House, have had two successful auctions and the Ultra-Aqua Show.

In this issue you will find comprehensive results of the Ultra-Aqua, year end breeding and horticultural program point totals and a species review written by Rich Serva.

The Board would like to thank our current members for their participation in club activities including attending meetings, submitting fish and plants to the BAP/HAP, bowl show entries, article submissions, and setup/tear down at our auctions and the Ultra-Aqua.



Two items of note! Please be sure to sign in at all our events (club meetings at Richie, Ultra-Aqua, Fall and Spring Auction) as these event sign ins count towards raffle tickets at our December raffle and also provide the club with statistics with regards to participation throughout the year which assists with planning for refreshments and the raffle.

As always—we graciously encourage our members to contribute articles for the newsletter relating to their experience in the hobby!

Spring Auction

March 2nd, 2025

Ultra-Aqua Show and Auction

June 21st and 22nd, 2025

Fall Auction

November 2nd, 2025

2024-2025 Board

President - Bud White
Vice-President - Herb Kinney
Secretary - Dave Girard
Treasurer - Rich Serva
Membership - Mike Swanson
Editor - Kristen Kodish
Program - Steve Brunn
Bowl Show - Ken McGill

BAP/HAP - Wayne Toven
Publicity - Morgan Dent
Refreshments - Elsie Swanson
FAAS Representative - Ron Mullens
Website - Steve Brunn
Multi-Media - Wayne Toven
Historian - Dave Williamson
Raffle - Kristen Kodish

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 registered 501(c)(3) non-profit 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 aquari-um hobby.

MEETINGS: Our meetings are held on the second Friday of each month at 8:00 p.m. at the Ritchie Memorial Shelter House, 109 West Ave-nue, Tallmadge, OH 44278. It is located West of Tallmadge Circle with access from Sperry Ave., behind Vet Clinic and across from the Chev-rolet dealer. 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 member-ship (10 to 17 years). Membership provides an opportunity to socialize with others that share your interests, a subscription to our bi-monthly electronic 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.

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 as available 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.

Check our website for membership information:

www.akronfishclub.com

Presidents Message

Bud White

Happy New year to everyone, hope your Christmas was great also, unfortunately I acquired COVID during the holidays and had to stay home behind locked doors, even Santa could not get into the house.

Fortunately I did not have any symptoms to deal with.

In case you did not know it, the club has a wonderful group of people for the clubs board members, everyone try's to get things done, works together well and generally tells me to shut up and get out of the way (GRIN).

We have most of the activities being scheduled for the new year and are always looking for new ideas, so if you have any suggestions let someone on the board know and if it is practical we will see about doing it.

Also, due to all of the not good things that have been happening in my life, I really have not been a very good president, but things are good now and you will see me more active this year.

Have a great day, Bud.

Bowl Show

Ken McGill

1/12/24	Goldfish	1st: Tom, 2nd: Mike T
	Male Guppies	1st: Emilie & Travis,
	Minnows Danios & Rasboras	1st: Emilie & Travis
2/9/24	Suckermouth Catfish	1st: Mike & Elsie, 2nd: Mike T, 3rd: Wayne
	Male Bettas	1st: Ed
	Female Guppies	1st: Mike & Elsie, 2nd:
3/8/24	Barbs	1st, 2nd, & 3rd: Wayne
	Mollies	no entries
	Corydoras Aspidoras & Brochis	1st & 2nd: Mike & Elsie, 3rd: Emilie & Travis
4/12/24	Swordtails & Platies	no entries
	Aquatic Invertebrates	1st: Mike & Elsie
	Amphibians	no entries
5/10/24	Goodeids	1st & 2nd: Wayne, 3rd: Mike & Elsie
	Rift Lake Cichlids	1st: Wayne, 2nd & 3rd:
	Characins	1st, 2nd, & 3rd: Wayne
7/12/24	Angelfish & Discus	1st & 3rd: Emilie & Travis, 2nd: Tom
	Killifish	1st: Adam
	Native Fish	1st: Adam, 2nd: Wayne

Thank you to our bowl show participants for 2024. This is a great way to show off your fish and receive feedback from knowledgeable hobbyists. We look forward to seeing continued entries in 2025!

Please see scoring, totals for 2024 and a list of upcoming bowl show classes on the following page.

8/9/24	All Other New World Cichlids	no entries
	Aquatic Plants	1st & 2nd: Adam
	Rainbowfish	no entries
9/13/24	Photography	1st, 2nd, & 3rd: Mike & Elsie
	Gouramis & Anabantoids	no entries
	Sharks & Loaches	no entries
10/11/24	Arts & Crafts	no entries
	Marine Fish	no entries
	AO Old World Cichlids	no entries
11/8/24	AO Livebearers	no entries
	AO Egglayers	no entries
	AO Catfish	1st, 2nd, & 3rd: Wayne

Bowl Show

Ken McGill

2024 GAAS Bowl Show Final Results

Name:	Total:
Wayne Toven	55
Mike & Elsie Swanson	41

Emilie Myatt& Travis Mil-	23
Tom Clinton	13
Adam Fox	13
Mike Thompson	9
Ed Bush	9
Steve Brunn	3

Scoring:
 1st: 4 + 1
 2nd: 2 + 1
 3rd: 1 + 1
 show:1 (max: 5)



GAAS 2025 Bowl Show Classes

January:

Goldfish, Male Guppies, Minnows Danios & Rasboras

February:

Suckermouth Catfish , Male Bettas, Female Guppies

March:

Barbs, Mollies, Corydoras Aspidoras & Brochis

April:

Swordtails & Platies, Aquatic Invertebrates, Amphibians

May:

Goodeids, Rift Lake Cichlids, Characins

June:

Angelfish & Discus, Killifish , Native Fish

July:

All Other New World Cichlids, Aquatic Plants, Rainbowfish

August:

picnic - no bowl show

September:

Photography, Gouramis & Anabantoids, Sharks & Loaches

October:

Arts & Crafts, Marine Fish, AO Old World Cichlids

November:

AO Livebearers, AO Egglayers, AO Catfish

Membership Report

Mike Swanson

Hello fellow fish enthusiasts, We had a great turn out for our December meeting, there was plenty of food and fish prizes for everyone. It was nice to chat with everyone. We gained a couple new members at the meeting.

Welcome Tom & Brody Arbour, also a welcome to Amanda & Bailey Collins. Brody DenHaese, Jason DenHaese, Sara Jennings, Eric Metansingh, Ethan Reed, & John Shaw also joined during the year.

These are our recently expired memberships: Charles Jermont, Ethan Morgan, Dan & Vi McMonigle, Herb Kinney, Marc Lomax, Lisa Ogorek, Jamie Williams, Paul Woodward, Bob Williams, Michael Cornelius, Ralph Grammer.

Hope to see you all at the next event, Happy New Year

Mike

BAP/HAP

Wayne Toven

Well it was a new year, we started fresh for the 2024 BAP / HAP year at the December 2023 meeting / Christmas party, and everyone was even at zero. We started off with a bang for 2024, we had 8 spawns, and 29 HAP submissions through February, the totals for all of 2024 are - the BAP had 29 spawns and the HAP had 78 submissions. We had a total of 12 members participate in the Breeder Award Program and Horticultural Award Program. Well winter is here again, as of this writing (in December 2024) the temperature is in the double digits, but this is Ohio and that can change at any time. While other club's fall auctions were about the same as in the past or smaller, ours on November 3rd was even larger than usual, over 1200 items went through it, thanks to all of our auctioneers!!

We still have the largest (55 classes) show in North America, Ultra – Aqua 2024!

The Kobayashi Award went to Dan & Karen Guman, the Catfish & Loach Championship went to Wayne Toven, and the Challenge Cup went to the Youngstown Area Tropical Fish Society.

BAP & HAP awards for the year were:

In January the Advanced Breeder Livebearers went to Justin Bahil

In March Advanced Breeder Sharks, Loaches, & Eels went to Bud White

In April a Centurion Award for 100 species of propagations and flowerings went to Adam Fox

In July yet another Master Breeder Cichlids went to Dave Williamson

In October Advanced Breeder Killifish went to Herb Kinney

In December a Breeder of the Year certificate and \$50 went to Dave Williamson

In December a Horticulturist of the Year certificate and \$50 went to Adam Fox

Congratulations to all, keep up the good work!

BAP/HAP Cont.**Wayne Toven****December 2023**

Species	Common name	Class	Points
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BAP*Adam Fox*

Xiphophorus helleri	Koi Kahaku Swordtail	Livebearer	5
Gymnocorymbus ternetzi	Black skirt tetra	Tetra & Characin	10
Oryzias latipes	Medaka ricefish	All other species	5

HAP*Adam Fox*

Lagenandra meeboldii	meeboldii red	C – vegetative	15
Lagenandra keralensis		C – vegetative	15
Cryptocoryne cordata	Siamensis	C – vegetative	15
Cryptocoryne wendtii	wendtii tropica	C – vegetative	15
Cryptocoryne wendtii	wendtii red	C – vegetative	15
Anubias barteri	var. Coffeefolia	C – vegetative	15
Rotala rotundifolia	orange juice	B – vegetative	10
Micranthemum tweediei	Monte Carlo	B – vegetative	10
Cryptocoryne nurii	Pahang mutated	C – vegetative	15
Cryptocoryne purpurea		C – vegetative	15
Samolus parviflorus	parviflorus red	C – vegetative	15
Rotala rotundifolia	blood red	B – vegetative	10
Bucephalandra sp. super blue		E – flowering	15
Bucephalandra sp. Lamandau purple		E – flowering	15

January 2024**BAP***Justin Bahil*

Ameca splendens	Butterfly goodeid	Livebearer	10
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Wayne Toven

Melanotaenia goldiei	Goldie river rainbow	Rainbowfish	10
Placidochromis sp.	Jalo Reef	Cichlid s.s.	10
Allophorus robustus	Bulldog goodeid	Livebearer	10

HAP*Justin Bahil*

Anubias barteri		E – flowering	15
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BAP/HAP Cont.**Wayne Toven**

Species	Common name	Class	Points
<i>Adam Fox</i>			
Echinodoras sp.	Frans Stoffels	C – vegetative	15
Taxiphyllum sp.	Peacock moss	B – vegetative	10
Ludwigia lacustris		B – vegetative	10
<i>Dave Williamson</i>			
Cryptocoryne aponogetofolia		C – vegetative	15
Crinum calamistratum	African onion plant	F – sexual propagation	15
Cryptocoryne nurii	Rosen maiden	E – flowering	15

February 2024**BAP***Dave Williamson*

Rocio octofasciata	Jack Dempsey	Cichlid s.s.	5
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HAP*Adam Fox*

Bucephalandra sp. silver powder		C –vegetative	15
Bucephalandra sp. Kedagang blue		C –vegetative	15
Bucephalandra sp. black leaf		C –vegetative	15
Bucephalandra sp. Lamandau blue		C –vegetative	15
Bucephalandra alamanda		C – vegetative	15

Anubias nangi		C – vegetative	15
Hygrophila lancea		A – vegetative	5

Rich Serva

Pogostemon erectus		B – vegetative	10
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March 2024**BAP***Bud White*

Sewellia lineolata	Reticulated hillstream loach	S,L,&E	15
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HAP*Adam Fox*

Anubias nana	var. Pinto	C – vegetative	15
Anubias sp. Jade		C – vegetative	15
Bucephalandra sp. red cherry		C – vegetative	15

BAP/HAP Cont.

Wayne Toven

Species	Common name	Class	Points
Bucephalandra sp. theia <i>Mike & Elsie Swanson</i>		C – vegetative	15
Ceratopteris thalictroides <i>Dave Williamson</i>	water sprite	A – vegetative	5
Microsorium pteropus	windelov	B – vegetative	10
Cryptocoryne nurii	Rosen maiden	C – vegetative	15

April 2024**HAP***Adam Fox*

Aponogeton ulvaceus		E – flowering	15
Aponogeton madagascariensis	Laceplant	E – flowering	15
Bucephalandra sp. Rainbow frost		C – vegetative	15
Bucephalandra sp. Black pearl		C – vegetative	15
Bucephalandra sp. Kedagang red		C – vegetative	15
Echinodoras sp.	Oriental sword	C – vegetative	15
Cryptocoryne retrospiralis		C – vegetative	15
Pogostemon erectus <i>Dave Williamson</i>		B – vegetative	10
Microsorium pteropus	Trident	B – vegetative	10
Cryptocoryne axelrodi		C – vegetative	15

May 2024**BAP***Justin Bahil*

Limia perugiae <i>Adam Fox</i>		Livebearer	5
Nematobrycon palmeri <i>Dave Williamson</i>	Emperor tetra	T&C	10
Amatitlania siquia	Honduran red point	Cichlid s.s.	5

HAP*Adam Fox*

Anubias nana	Bonsai	C – vegetative	15
Bucephalandra sp.	Rainbow marble	C – vegetative	15

BAP/HAP Cont.

Wayne Toven

Species	Common name	Class	Points
Bucephalandra sp.	Purple	C – vegetative	15
Bucephalandra sp.	Brownie firebird	C – vegetative	15
Bucephalandra sp.	Belindae	C – vegetative	15
Bucephalandra sp.	Starglitz	C – vegetative	15
Anubias barteri	Petite white	C – vegetative	15
<i>Mike & Elsie Swanson</i>			
Acorus graminea	Variegated Acorus	E – flowering	10

July**BAP***Bill Bilski*

Nancara anomala	Golden eye dwarf	Cichlid s.s.	5
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Joe Reich

Heros efasciatus		Cichlid s.s.	10
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Dave Williamson

Enigmatochromis lucanusi		Cichlid s.s.	15
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Maylandia greshaki	William's Mbuna	Cichlid m.b.	15
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HAP*Adam Fox*

Aponogeton madagascariensis	Laceplant	F – sexual	15
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Lobelia cardinalis	Cardinal plant	B – vegetative	10
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Lilaeopsis Mauritius	microsword	B – vegetative	10
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Cryptocoryne sp.	Silver queen	C – vegetative	15
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Rich Serva

Syngonium podophyllum	Arrowhead	D – vegetative	10
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Monstera dansonii	Dwarf Swiss cheese	D – vegetative	10
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Ruellia brittoniana	Blue bell	D – vegetative	10
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Tradescantia zebrina	Wandering Jew	D – vegetative	10
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Bucephalandra sp.	Purple Adonis	E – flowering	15
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Dave Williamson

Pogostemon atellata	octopus narrow leaf	B – vegetative	10
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BAP/HAP Cont.

Wayne Toven

Species	Common name	Class	Points
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August 2024**BAP***Clay Kinney*

Poecilia sphenops	Black molly	Livebearer	5
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Mike & Elsie Swanson

Neolamprologus caudopunctatus		Cichlid s.s.	15
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Orizias woworae	Daisy blue ricefish	A.O.sp.	5
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HAP*Dave Williamson*

Cryptocoryne crispatula		C – vegetative	15
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Alternanthera reineckii		B – vegetative	10
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September 2024**BAP***Mike & Elsie Swanson*

Iodotropheus sprengerae	rusty cichlid	Cichlid m.b.	15
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Ancistrus sp.	Calico bristlenose	Catfish	20
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Thomas Utt

Poecilia reticulata	yellow snakeskin guppy	Livebearer	5
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Xenotoca doadrioi	San Marcos redbtail splitfin	Livebearer	10
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Dave Williamson

Anomalochromis thomasi	African butterfly	Cichlid s.s.	10
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HAP*Adam Fox*

Lagenandra meeboldii	Silver powder	C – vegetative	15
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Barclaya longifolia		C – vegetative	15
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Eleocharis acicularis	needle spike rush	B – vegetative	10
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Rich Serva

Anubias nana		E – flowering	15
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Bucephalandra sp. thiea		E – flowering	15
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Mike & Elsie Swanson

Anubias nana	Petite	C – vegetative	15
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Dave Williamson

Hygrophila corymbosa	Compacta	A – vegetative	5
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BAP/HAP Cont.

Wayne Toven

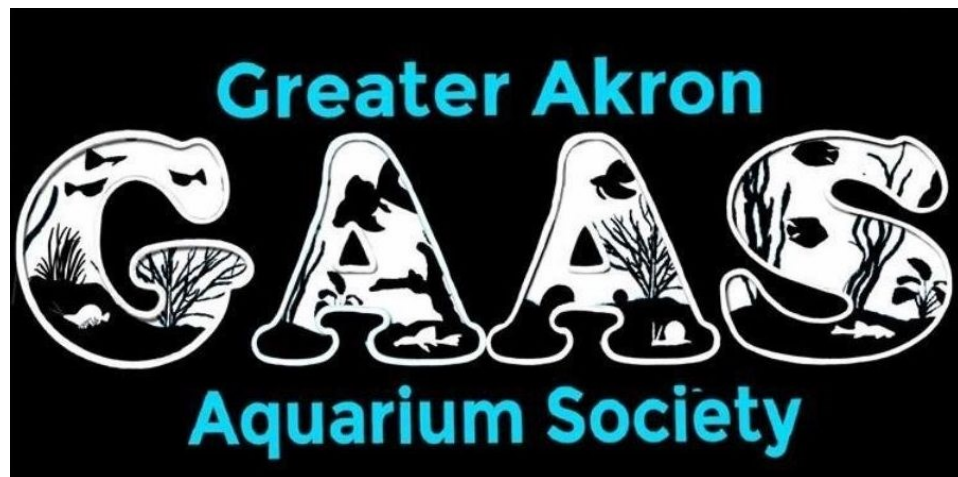
<u>Species</u>	<u>Common name</u>	<u>Class</u>	<u>Points</u>
October 2024			
BAP			
<i>Herb Kinney</i>			
Fundulopanchax scheeli		Killifish	10
<i>Dave Williamson</i>			
Melanochromis vermivourous	purple Mbuna	Cichlid m.b.	15
HAP			
<i>Mike & Elsie Swanson</i>			
Cryptocoryne cordata	Siamensis	C – vegetative	15
November 2024			
BAP			
<i>Justin Bahil</i>			
Skiffia multipunctata	Spotted sawfin goodeid	Livebearer	10
<i>Dave Williamson</i>			
Psedomugil signifier	Pacific blue eye	Rainbowfish	10
<i>Bud White</i>			
Julidochromis dickfeldi	Brown Julie	Cichlid s.s.	15
Poecilia wingei	Japanese blue Endlers	Livebearer	5
HAP			
<i>Adam Fox</i>			
Cryptocoryne axelrodi		C – vegetative	15
Cryptocoryne spiralis	red tiger	C – vegetative	15

And your 2024 totals are...

BAP/HAP Cont.**Wayne Toven**

	BAP	Points	HAP	Points
Dave Williamson	7	75	11	135
Adam Fox	4	30	55	765
Mike & Elsie Swanson	4	55	3	40
Justin Bahil	3	25	1	15
Thomas Utt	3	15	0	0
Wayne Toven	3	30	0	0
Bill Bilski	1	5	0	0
Clay Kinney	1	5	0	0
Herb Kinney	1	10	0	0
Joe Reich	1	10	0	0
Bud White	1	15	0	0
Rich Serva	0	0	1	10

Congratulations!



Program rules and forms available by clicking the logo above.

BAP/HAP Cont.

Wayne Toven

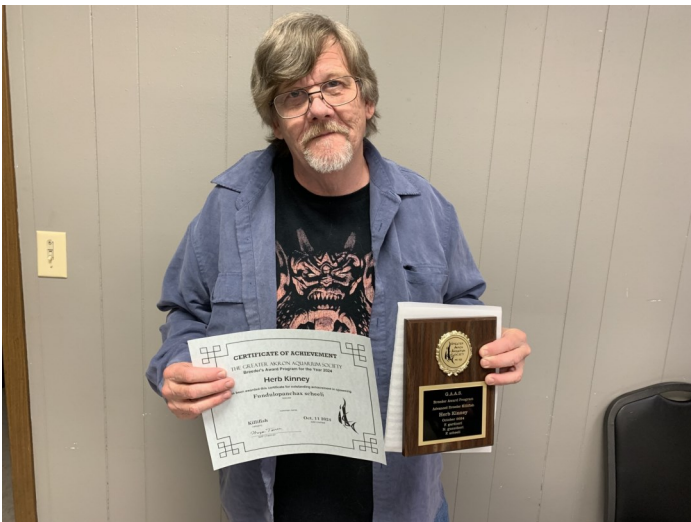


Above: In May 2024, Adam Fox received the GAAS Centurion Award for outstanding achievement, Horticultural Award Program, 100 propagations or flowerings.



Above: Dave Williamson received the GAAS Breeder Award Program, Master Breeder, Cichlids, in August 2024.

Below: In October 2024, Herb Kinney received the GAAS Breeder Award Program, Advanced Breeder, Killifish Award.



Above: Bud White receives the GAAS Breeder Award Program, Advanced Breeder, Sharks, Loaches, and Eels in July 2024.

Ultra-Aqua 2024 Results

The Greater Akron Aquarium Society 2024 Ultra-Aqua Show Results Sunday, June 9, 2024 Tallmadge Community Center

The show had 372 entries in 55 classes.
There were 31 entrants, and 6 clubs participated.

Winners of the Special Awards

Special Award	Sponsor	Winner
Best of Show Livebearer	Justin Bahil	Patrick Sabourin: American ' Schubel Green
Best of Show Egglayer	Cain Accounting & Tax	Kristen Kodish & Justin Bahil: <i>Melanotaenia bosemani</i> Rainbow
Best of Show Cichlid	Ohio Cichlid Association	Tom Clinton: Koi Angelfish
Best of Show Goldfish	Yaeko Kobayashi Trust	Dan & Karen Guman: Ryukin
Best of Show Catfish/Loach	Eric Bodrock (All Oddball Aquatics)	Dave Williamson: <i>Corydoras elegans</i>
Best of Show Display	Agnoaquatics (Broadview Heights Ohio)	Ann Yao Lii: Goldfish – Make Joy cross-stitch
Best of Show	Agnoaquatics (Broadview Heights Ohio)	Tom Clinton: Koi Angelfish
Catfish and Loach Championship	The Greater Akron Aquarium Society	Wayne Toven
Kobayashi Goldfish Championship	The Greater Akron Aquarium Society	Dan & Karen Guman
Presidents Trophy	The Greater Akron Aquarium Society	Dan & Karen Guman
Challenge Award	The Greater Akron Aquarium Society	Youngstown Area Tropical Fish Society

Winners of the 55 Classes

Cla ss	Description	Sponsor	1st	2nd	3rd	Entries
1	Decorated Aquariums	Dave Williamson	Dave Williamson	Mark Allar	Amy Mullens	4
2	Aquarium Plants	Adam Fox	Ed Bush - Java Fern	Mark Allar - Madagascar Lace	Dave Williamson - <i>Cryptocoryne axelrodi</i>	8
3	Photography – Digital Media	Nicki Hufford Photography	Roberto Pratti - <i>Enantiopius melanogenys</i>	Jeffrey Swanson - <i>Pelvicachomis subocellatus</i>	Roberto Pratti - L201 Male	36
4	Photography – Prints	Beautiful Aquatics	Roberto Pratti - Loricaria sp Rio atabapo	Roberto Pratti - Pleco male	Roberto Pratti - <i>Enantiopius melanogenys</i>	7
5	Arts & Crafts – Fine Art or Hand Crafts	In memory of Teri Seufert	Ann Yao Lii - Goldfish - Make Joy Cross- stitch	Morgan Dent - <i>X. alvarezi</i> sword drawing	Mike & Elsie Swanson - Quilled Angel	7
6	New World Cichlids 5" & Under	Garden Evolution – Brad Johnson	Dave Williamson - Honduran Red Point	Bill Sensor - <i>Microgeophagus altispinosa</i>	Mark Allar - Golden Ram	6
7	New World Cichlids over 5"	Zoogari Pets – Norton, OH.	Bill Sensor - <i>Herichthys carpintis</i> Escondido	Bill Sensor - <i>Aequidens supermaculatus</i>	Bill Sensor - <i>Aequidens metae</i>	4

Ultra-Aqua 2024 Results

8	Angelfish & Discus	Herb Kinney	Tom Clinton - Koi Angelfish	Kim Griffith - Black	Doug Singer - Black Marble	11
9	Mbuna (Pseudo., Mel., Labeo., Labido., Cyno., etc.)	Christopher McCracken	Dave Williamson - <i>Metroclima greshaki</i>	#N/A	#N/A	1
10	Hap. & Aulonocara types	RMS Aquaculture	Ed Bush - Lemon Jake	Wayne Toven - Haplochromis sp.	Joseph Girard - Hap burtoni	6
11	Lamp, Neo, Alto, Julido, Chalino, & Telmatochromis	David Girard	Dave Williamson - <i>Lamprologus helianthus</i>	David Girard - <i>Neolamprologus buescheri</i>	Patrick Sabourin - <i>Julidochromis regani</i> male	3
12	All Other Old World Cichlids	Mark Kazanoff	Bill Sensor - <i>Pelmatochromis nigrofasciatus</i>	Bill Sensor - <i>Pelvicachromis Drachenfelsi wouri</i>	Bill Sensor - <i>Pelvicachromis kribensis</i> Idenau	7
13	Guppies – Males, Solid Color Tail	John Baad	Patrick Sabourin - American x Schubel Green	Patrick Sabourin - American Green	Mark Allar - Blue Delta	7
14	Guppies – Males, Variegated Color Tail	Jeff Plazak	Dave Williamson - Double Sword Guppy	Patrick Sabourin - Variegated Half Black AOC	#N/A	2
15	Guppies – Females	Justin Bahil	Dave Williamson - Yellow Geissen Guppy	Patrick Sabourin - Half Black AOC	Mike & Elsie Swanson - Platinum Blue Redfin	3
16	Swordtails – Common Finnage	Ray Bierbower	Kristen Kodish & Justin Bahil - Red male Swordtail	Mark Allar - Orange Swordtail	Kim Griffith - Common finnage Orange & Black female	16
17	Swordtails – Fancy Finnage	Mike & Elsie Swanson	Dan & Karen Guman - Lyretail Sword	Mark Allar - HiFin Vienna Red Swordtail	Dan & Karen Guman - Fancy Sword	5
18	Platies & Variatus – Common Finnage	Bierbower Aquatics	Doug Singer - Mickey Mouse Platty male	Doug Singer - Mickey Mouse Platty female	Mark Allar - Saddleback Platy	6
19	Platies & Variatus – Fancy Finnage	Boggs Aquatics - Cuyahoga Falls	Mark Allar - HiFin Sunset Platy	Mark Allar - HiFin Sunset Platy	Mark Allar - HiFin Sunset Platy	5
20	Mollies	Kim & Jeff Robourn	Mark Allar - Orange Marble Sailfin Molly	Doug Singer - Sailfin Mollies	Mark Allar - Black Lyretail Molly	11
21	Goodeids	George Hollister	Wayne Toven- <i>Chapalichthys encaustus</i>	Wayne Toven- <i>Xenotania resolanae</i>	Dave Williamson - <i>Allophorus robustus</i> male	7
22	All Other Livebearers	Rich Serva	Mark Allar - <i>Brachyrhaphis roseni</i>	Emilie Myatt & Travis Miller - <i>Dermogenys pusilla</i> Platinum Halfbeak	Mark Allar - <i>Monticulus swordtail</i>	6
23	Loaches – Botia species	Jeff Plazak	Dave Williamson - <i>Botia sidthimunki</i>	Wayne Toven- <i>Sinibotia robusta</i>	Wayne Toven - <i>Botia kubotai</i>	5
24	Loaches – All Other Varieties	Adam Fox	Emilie Myatt & Travis Miller - <i>Misgurnus anguillicaudatus</i> Golden Albino WeatherLoach	Wayne Toven- <i>Tracatichthys pulcher</i>	Kim Griffith - Brown Kuhli	9
25	Synodontis Catfish	Ron & Amy Mullen	Wayne Toven- <i>Synodontis waterloti</i>	Wayne Toven- <i>Mochokiella paynei</i>	Dave Williamson - <i>Synodontis lucipinnis</i>	5

Ultra-Aqua 2024 Results

26	Corydoras Catfish	Zoogari Pets – Norton, OH.	Dave Williamson - <i>Corydoras elegans</i>	Patrick Sabourin - <i>Corydoras sterbai</i> male	Mark Allar - <i>Corydoras boesmani</i>	19
27	Aspidoras & Brochis Catfish Species	Gary Mendez	Mark Allar - Scleromystax CW038	Mark Allar - Scleromystax C112	Wayne Toven - <i>Aspidoras ramundi</i>	7
28	Suckermouth Catfish – Pleco Types	Fatfish Aquatics	Wayne Toven - L240 Vampire Plece	Dan & Karen Guman - Peckoltia sp. L494	Melissa Coughran - Hypancistrus L471 Dwarf Snowball Pleco	11
29	Suckermouth Catfish – All Other Types	Youngstown Area Tropical Fish Society	Bill Sensor - <i>Ottocinclus arnoldi</i>	Bill Sensor - <i>Ottocinclus cocama</i>	Wayne Toven - <i>Rineloricaria hasemani</i>	7
30	All Other Catfish 6" & under	Jeff Plazak	Tom Rizzo - <i>Microglanis iheringi</i>	Tom Rizzo - <i>Liosamadora morrowi</i>	Wayne Toven - <i>Lophiobagus cyclurus</i>	5
31	All Other Catfish over 6"	Boggs Aquatics - Cuyahoga Falls	Dave Williamson - Asian Bumblebee Catfish	Wayne Toven - <i>Hoplosternum littorale</i>	Wayne Toven - Southern Speckled Bullhead	3
32	Betta splendens – Males	Ralph Grammer	Melissa Coughran - Halfmoon Plakat Multicolor	Dan & Karen Guman - Male	Dan & Karen Guman - Combtail Male Betta	6
33	Betta splendens – Females	Fish City Pets – Barberton Crystal & Nate	Melissa Coughran - Halfmoon Plakat Candy	Melissa Coughran - Halfmoon Plakat Candy	Patrick Sabourin - Female Red	6
34	Gouramis (Trichogaster and Colisa sps.)	Youngstown Area Tropical Fish Society	Emilie Myatt & Travis Miller - <i>Trichogaster trichopterus</i> Blue Gourami	Melissa Coughran - <i>Trichogaster lalius</i> Dwarf Gourami	Mark Allar - Flame Gourami	6
35	All Other Labyrinth Fish	Jeff Plazak	Wayne Toven - <i>Betta balunga</i>	Mark Allar - Sparkling Gourami	Dave Williamson - Day's Spiketail Paradisefish	10
36	Killifish	Don & Rene Guman	Melissa Coughran - <i>Fundulopanchax gardneri</i>	Patrick Sabourin - <i>Fundulopanchax gardneri</i> 'Innidere' male	Mark Allar - <i>Aplocheilichthys lineatus</i> Golden Wonder Killi	8
37	Characidae (Tetras & their relatives)	Regina Spotti	Mark Allar - Sailfin Tetra	Melissa Coughran - <i>Inpaichthys kerri</i> Super Blue Emperor Tetra	Bill Sensor - <i>Nanostomus mortenhalleri</i>	15
38	Barbs	Jeff Plazak	Dan & Karen Guman - Dennison Barb	Dan & Karen Guman - Tiger Barb	Dave Williamson - Banded Barb	6
39	Danios	Doug Singer	Dave Williamson - Giant Danio	Kim Griffith - Gray Orange & Silver Giant Danio	Wayne Toven - Danio kerri	6
40	Minnows & Rasboras	Jeff Plazak	Dan & Karen Guman - Longfin White Cloud Mountain Minnow	Dave Williamson - Porkchop Rasbora	Dan & Vi McMonigle - <i>Rasbora heteromorpha</i>	4
41	Rainbowfish	Fish City Pets – Barberton Crystal & Nate	Kristen Kodish & Justin Bahil - <i>Melanotaenia boesemani</i> Rainbow	Melissa Coughran - <i>Iriatherina wernerii</i> Threadfin Rainbow	Wayne Toven - <i>Melanotaenia parkinsoni</i>	9

Ultra-Aqua 2024 Results

42	Native Fish – Continental US	Dave Williamson	Dave Williamson - Metallic Shiner	Dave Williamson - <i>Gambusia holbrooki</i> melanistic Male	Mike & Elsie Swanson - <i>Elassoma evergladei</i> pygmy sunfish	4
43	All Other Species	Zoogari Pets – Norton, OH.	Dan & Karen Guman - Flying Fox	Dave Williamson - Siamensis Algae Eater	Kristen Kodish & Justin Bahil - <i>Polypterus senegalus</i> Senegal Bichir	3
44	Oranda Goldfish	Jeff Plazak	Dan & Karen Guman - Oranda	Dan & Karen Guman - Oranda	Dave Williamson - Red & White Oranda	3
45	Lionhead and Ranchu Goldfish	Dan & Karen Guman	Dan & Karen Guman - Lionhead	Dan & Karen Guman - Lionhead	Dan & Karen Guman - Lionhead	3
46	Ryukin, Ribbontail & Veiltail Goldfish	Yaeko Kobayashi Trust	Dan & Karen Guman - Ryukin	Dan & Karen Guman - Ryukin	Dan & Karen Guman - Ryukin	4
47	Pearlscale Goldfish	The Reel Family	Dan & Karen Guman - Pearlscale	Dave Williamson - Red Crowned Pearlscale	Dan & Karen Guman - Pearlscale	4
48	Eyetype Goldfish	Dan & Karen Guman	Dan & Karen Guman - Telescope	Dan & Karen Guman - Telescope	Tom Clinton - Black Moor	6
49	Single Caudal Goldfish	Jeff Plazak	Dave Williamson - Red & White Comet	Dan & Karen Guman - Shubunkin	Dan & Karen Guman - Shubunkin	4
50	All Other Goldfish Varieties	Jeff Plazak	Dave Williamson - Red & White Wakin	Dan & Karen Guman - Jikin	#N/A	3
51	Invertebrates – Freshwater or Marine	Joe Reich	Dave Williamson - Mexican Orange Dwarf Crayfish	Wayne Toven - <i>Cherax quadricarinatus</i>	Dan & Karen Guman - Apple Snail	5
52	Amphibians	Cleveland Reptile Show Rob & Amy Zerkle	Emilie Myatt & Travis Miller - Gravid Female Axanthic Axolotl	Emilie Myatt & Travis Miller - Gravid female Golden Albino Axolotl	Emilie Myatt & Travis Miller - Female Leucistic Axolotl	4
53	Pairs – Male and Female	Jeff Plazak	Dan & Karen Guman - <i>Xenotoca lyonsi</i>	Steve Brunn - Red Fancy Guppies	Bill Sensor - <i>Barbus jae</i>	13
54	Group of Six – Adult fish	Bud White	Patrick Sabourin - <i>Fundulopanchax gardneri</i>	Mike & Elsie Swanson - <i>Corydoras imitator</i>	Mark Allar - <i>Corydoras napoensis</i>	5
55	Family Class – Parents and min 6 fry < 3 mo	Cleveland Reptile Show Rob & Amy Zerkle	Mark Allar - Hifin Sunrise Platy	Mike & Elsie Swanson - <i>Neolamprologus caudopunctatus</i>	Tom Clinton - Super Red Pleco	6



Tom Clinton wins Best in Show and Best in Show Cichlid with a beautiful Koi Angelfish.

Ultra-Aqua 2024 Results



Above: Dan and Karen Guman win the Kobayashi Goldfish Championship, Presidents Trophy and Best in Show Goldfish.



Above: Wayne Toven wins the Catfish and Loach Championship.



Above: Patrick Sabourin wins Best of Show Livebearer with an American x Schubel Green.



Above: Best of Show Display awarded to Ann Yao Lii for her goldfish make joy cross stitch and accepted by Dan McMonigle.



Left: Dave Williamson wins Best of Show Catfish/Loach with a Corydoras elegans.

Ultra-Aqua 2024 Results



The Youngstown Area Tropical Fish Society wins this years Challenge Award.

Thank you to all who
came from near and far
to enter, judge and enjoy
the Ultra-Aqua 2024!

Xiphophorus alvarezii (Species Review)

Rich Serva



Introduction

In 1960, Donn E. Rosen described the Chiapas swordtail as a subspecies of *Xiphophorus helleri*. The type locality was listed as Rio Santo Domingo, a tributary of the Rio Jatate of the Rio Usumacinta system in Chiapas. The species was named after José Álvarez del Villar, the Mexican ichthyologist who sent the original specimens to Rosen.

The swordtails belong to the genus *Xiphophorus*, which is Greek for “sword carrier”. Although many people believe that this genus was named after the tail extension, it was named after the gonopodium on the male. In 1848, Heckel named this genus and placed three species within it: *Xiphophorus helleri*, *Pseudoxiphophorus bimaculata*, and *Poeciliopsis gracilis*.

Description

Xiphophorus alvarezii is a species of livebearing freshwater fish of family Poeciliidae, and genus *Xiphophorus*. The base color of this fish is blue-green above the lateral line with a yellow to orange blush below the lateral line. It has a red lateral line and some populations are known to show additional red lines. The tail extension is yellow to orange with black edging. The dorsal usually has two rows of red spots.

The Trans-Mexican Volcanic Belt (TMV) in the state of Veracruz is an important divide and barrier separating many groups of Mexican fish. This terminology has been used to separate the northern and southern platies as well as the northern swordtails from the southern grouping. Kallman and Kazianis further separated the southern swordtails into the clemenciae group (*clemenciae*, *monticolus* and *mixei*) and helleri groups (*helleri*, *alvarezii*, *signum*, *mayae* and *kallmani*). The clemenciae and helleri groups are considered unrelated although their morphology looks similar.

The clemenciae group (like the northern swordtails) is endemic to a single river system and restricted to the headwater streams. The *helleri*, *mayae* and *kallmani* swords are found some 1000 km from the TMV and generally inhabits the coastal plains as high as 1500 m. *X. signum* and *X. alvarezii* have been found in the headwater streams of the Rio Usumacinta drainage in Chiapas and Guatemala.

Fish in the hobby

There have been three populations of *Xiphophorus alvarezii* in the hobby. The yellow population was collected by Dave Macallister at 44 km down the road from Coban to Chisec in Guatemala in 2000, and there was a red population from Europe circulating during the same time. Currently, the only population still available originated from the Xiphophorus Genetic Stock Center (XGSC).

This stock of *X. alvarezii*, Dolores, was derived from fish collected by Donn Rosen in the late 1960s and early 1970s. The Dolores stock is found naturally in the Rio Dolores system. The males are characterized by a bright red flush below the lateral line, extending from operculum to caudal fin.

Xiphophorus alvarezi (Species Review)

Rich Serva

Males carry a Y-linked gene for orange sword color. Females also carry this gene, but do not express the trait.

XGSC no longer carries this species, but this population is still in the hobby. I had kept it around for 20 years but lost my stocks in late 2022. Greg Sage (Select Aquatics) had gotten the fish from me many years back, isolating gold-bodied and albino individuals that he maintained as separate stocks. Charles Clapsaddle brought the fish to the 2023 ALA convention, where I was fortunate to win the auction bid. The Dolores stocks most likely originated from Greg's fish, or the populations being maintained by Rick Borstein or Chuck Bremer.

Care

While swordtails can be kept in 15- or 20-gallon tanks, wild populations of swordtails thrive best in breeder tanks that are 30 gallons or larger. Swordtails generally do well on flakes and freeze-dried diets, but frozen foods are also welcome. As with many swordtails, adults will chase fry at first, but the cannibalism lessens as the adults get used to juveniles in the tank.

Right: A male x. alvarezi from the Clapsaddle line



Left: A female x. alvarezi from the Clapsaddle line

Publication Reviews

Wayne Toven

Hey, we're back, in case you forgot what this is, I get publication exchanges from various other fish clubs, I look for original articles by club members that are worthy of a read. Below are several articles, if you would like to read any of these let me know and I will email it to you or bring a hard copy to a meeting for you. This is the first review for 2022 so there are articles from 2020 up till now.

First of all a few of our members had article reprints by the **Missouri Aquarium Society Inc.** in the Apr 2020 issue of *The Darter*, *Fun Facts About Dr. John Endler*, by Steve Brunn, and *Aquatic Birds & the Bees, the Back Story in Fish Reproduction*, by Rich Serva. A reprint in **Bucks County Aquarium Society** in the Nov 2020 issue of the Buckette was Wayne Toven's article *A Jewel in the Barb Family* Another reprint in **Greater Detroit Aquarium Society**, *Tropic Tank Talk*: Apr 2021 was Elsie Swanson's article *Youkihi Medaka Oryzias latipes var. Youkihi*. In the **Bucks County Aquarium Society** Feb. 2022 issue of the Buckette was Wayne Toven's article *Basic Tales of the Crypts*. Yet another one in the **Bucks County Aquarium Society** March 2022 issue of the Buckette was Steve Brunn's article *Approaches to Fighting and Fostering Green Water*.

Editors Note: We currently have a backlog of information for the publication exchange and are reporting information from 2022-2024.

Missouri Aquarium Society Inc. *The Darter*: Jan/Feb 2022

Summer Entertainment at the Outdoor Ponds, by Chuck Bell

What is a Limia? By Mike Hellweg

Horticultural Award Program – the First 30 Years, by Mike Hellweg

Caltha palustris – Marsh Marigold, Kingcup, Cowslip, Cowflock, by Micah Issitt

Peltandra virginica – Arrow Arum, Green Arrow Arum, Tuckaho, by Micah Issitt

Missouri and Aroids, by Micah Issitt

Sarnia Aquarium Society, *Aqua Antics*: Jan/Feb 2022

Betta patoti, by Peter Melady

Greater Pittsburgh Aquarium Society Inc. *Finformation*: Feb 2022

Growing Out Fry, Susan Everett

Kitchener – Waterloo Aquarium Society, *Fins and Tales*: Mar 2022

Strange and Unusual Fish: Anableps, the Four Eye Fish, by Glenn Roberts

Missouri Aquarium Society Inc. *The Darter*: Mar/Apr 2022

Aquascaping a 3 Gallon “Bookshelf” Aquarium for Neocaradina Shrimp, by Steve Coxon

Greater Pittsburgh Aquarium Society Inc. Finformation: March 2022

Raising Aulonocara baenschi in Outdoor Pond vs. Indoor Tank, by Jim Felix

Breeding Rainbow Cichlids, by Jim Felix

Greater Detroit Aquarium Society, Tropic Tank Talk: March 2022

Yellow Fin Corys – Corydoras C123, by Mark Allar

Scleromystax C112 “Baianinho II”, by Mark Allar

Kitchener – Waterloo Aquarium Society, Fins and Tales: Apr 2022

The Corydoras Corridor! Corydoras panda, by Al Ridley

Kitchener – Waterloo Aquarium Society, Fins and Tales: May 2022

The Weather Loach – Misgurnus anguillicaudatus, by Glenn Roberts

Missouri Aquarium Society Inc. The Darter: May/June 2022

The Green Neon Tetra – Paracheirodon simulans, by Mike Hellweg

Phyla lanceolata and Phyla nodiflora, by Micah Issitt & Adrienne Legault

On Poisonous Plants, Some in Native Water Gardens, by Micah Issitt

Greater Pittsburgh Aquarium Society Inc. Finformation: May 2022

Corydoras serratus, by Eric Bodrock

Missouri Aquarium Society Inc. The Darter: July/Aug 2022

The Big and Little of it – Two Recent Spawns: Buccochromis rhoadesh and Nannostomus trifasciatus, by Mike Huber

Neon and Cardinal Tetras – Paratheirodon innesi and Paratheirodon axelrodi, by Mike Hellweg

Heteranthera dubia – Water Stargrass, Stargrass, Grassleaf, Mud Plantain, by Micah Issitt

Plantago major and Relateds Species - White Man’s Foot, Common plantain, and Fleaworts, by Micah Issitt & Adrienne Legault

Greater Pittsburgh Aquarium Society Inc. Finformation: July 2022

Telmatochromis vittatus, by Robin Shemela

Corydoras carlae, by Regina Spotti

Greater Pittsburgh Aquarium Society Inc. Finformation: Aug 2022

Fundulopanchax gardneri (P82), by Joe Doyle

Spawning the Dark Knight Ram, by Joe Doyle

Missouri Aquarium Society Inc. The Darter: Sept/Oct 2022

Spawning Sewellia lineolata – Reticulated Hillstream Loach, by Mike Huber

Jenynsia onca – the One Sided Livebearer, by Mitchel Wendel

Measels Tetra – Pseudochalceus kyburzi, by Chase Klinestecker

Spawning Betta splendens – the Common Bubblenesting Betta, by Steve Coxon

The Mouth Brooding Bettas, by Mike Hellweg

Helanthium tenellum – Dwarf Burrhead, by Micah Issitt & Adrienne Legault

Friends Don't Give Friends These Pest Plants, by Gary Lange & Justin Warnock

Youngstown Area Tropical Fish Society, the Youngstown Aquarist: Sept 2022

Spawning the Dark Knight Ram, by Joe Doyle

Brooklyn Aquarium Society, Aquatic News: Fall 2022

Black Eggs, by Joe Graffagnino

Greater Pittsburgh Aquarium Society Inc. Finformation: Oct 2022

Characodon lateralis, Los Berros: the Rainbow Goodeid, by Ed Moats

Missouri Aquarium Society Inc. The Darter: Nov/Dec 2022

Collecting Native Fishes in Il. & Mo. – the Laws, Do's & Don'ts, by Robert A. Hrabik

A Mess Free Approach to Microworms – Live Food for Young Fry or Nanofish, by David Farel

Forgettable Live Focus – Three Zero – Maintenance Cultures, by David Farel

Fish – O - Nomics 101, How Much is that Guppy in the Window? By Mike Hellweg

Fish – O – Nomics 102, What is the Value of a Guppy?, by Kevin Plazak

Proserpinaca palustris, Mermaidweed, Marsh Mermaidweed, by Micah issitt & Adrienne LeGault

Greater Pittsburgh Aquarium Society Inc. Finformation: Dec. 2022

Scleromystax prionotos, by Regina Spotti

Corydoras sp. C121, by Regina Spotti

Characodon audax – the Black Prince, by Ed Moats

Missouri Aquarium Society Inc. The Darter: Jan/Feb 2023

Spawning Betta uberis – a Submerged Bubble Nester, by Steve Coxon

The Goldfish – Carassius auratus, by Mike Hellweg

Nuphur lutea, by Micah Issitt & Adrienne LeGault

The Taxonomic Order Nymphaeales Contain Multiple Families with “Water Lilies”, by Micah Issitt

Greater Pittsburgh Aquarium Society Inc. Finformation: Mar. 2023

Surprise, Surprise, Lamprologus ocellatus “Blue”, by Jim Felix

Who C.A.R.E.S.: an Introduction into Conservation, by Ed Moats

Missouri Aquarium Society Inc. The Darter: Mar/Apr 2023

Remembering Ray “Kingfish” Lucas, by Mike Hellweg

The Safe Use of Safe – T – Sorb – for Your Planted Tank, by Andrej Spec

The Variatus Platy – Xiphophorus variatus, by Mike Hellweg

Kitchener – Waterloo Aquarium Society, Fins and Tales: June 2023

Yikes! Another Duckweed! By Glenn Roberts

Eastern Iowa Aquarium Association, Fin Flap: Aug. 2023

Neocaridina davidi, by Cory Respalje

Xenotoca doadrioi, by Cory Respalje

Greater Pittsburgh Aquarium Society Inc. Finformation: Mar. 2023

My Kuhli Loach Story – Exploits of a Real Survivor, by Scott Graner

Greater Pittsburgh Aquarium Society Inc. Finformation: May 2023

Corydoras Hephaestus, by Eric Bodrock

Youngstown Area Tropical Fish Society, The Youngstown Aquarist: Aug. 2023

Cyprinodon brontotheroides, the *Durophage Pupfish*, by Joe Doyle

The Pea Puffer “Pest Snail Assassin” Carinotetodon travancoricus, by Bill Chandler

Spawning a Giant, the Gulf Killifish – Fundulus grandis, by Joe Doyle

Missouri Aquarium Society Inc. The Darter: May/June 2023

Secondary Pigments in Aquatic Plant – for Your Planted Aquarium, by Andrej Spec

“Rolling” Your Own Root Tabs – for Your Planted Aquarium, by Andrej Spec

Nymphaea odorata, *White Water Lily*, *Fragrant Water Lily*, *American Water Lily*, by Micah Issitt

The Knifebelly Livebearer – Alfaro cultratus, by Mike Hellweg

Missouri Aquarium Society Inc. The Darter: July/Aug 2023

Endangered Paradise, Limia Species in Lake Miragoane Haiti, by Robert Rodriguez-Silva, James Josaphat, Patricia Torres-Pineda & Ingo Schlupp

The Ultimate Guide to Feeder Worms – Part 1 – White, Grindal, & Other Enchytraeids, by David Farel

Spawning Apistogramma iniridae, by Steven Coxon

The Black Marble Hoplo – Megalechis thoracata, by Mike Hellweg

Ecological Succession in the Planted Aquarium – Part 1, by Andrej Spec

Propagating Aponogeton, by Andrej Spec

Nelumbo lutea – the American Lotus, by Micah Issitt

Missouri Aquarium Society Inc. The Darter: Nov/Dec. 2023

Selective Breeding – Part 1: Getting Started, by Greg Sage

Girardinichthys multiradiatus, by Mike Huber

Millennial Misadventures in Managing MTS (multiple tank syndrome), by Carol Muehlhauser

Good Goodeids – the Characodon Goodeids: C. lateralis & C. audax, by Mike Hellweg

Keeping Faxonius virilis – the Virile Crayfish, by James E. Wetzel

What's Cool about Aquatic Shrimp, by Lil Mango

Easy Mode, an Introduction to CO2: Part 2 DIwhys & Wherefores, by Andrej Spec

Warm, Cool, & Cold Temperatures in the Frshwater aquarium, by David Farel

Kitchener – Waterloo Aquarium Society, Fins and Tales: Feb. 2024

How do Amphibious Plants Transition from Air to Water, by Glenn Roberts

Missouri Aquarium Society Inc. The Darter: Mar/Apr 2024

Selective Breeding, Part 3: Refining the Process, by Greg Sage

Selective Breeding, a Seven Step Preference Guide, by Greg Sage

The Suckers of Sunda – Part 1, by Samuel Joseph Fernwald & Marcel Wuethrich

The Two Net Tec, Advanced Fish Wrangling, by Corey Fitzpatrick

The Bolivian Ram, Microgeophagus altospinosus, by Mike Hellweg

"The Doctor Fish" Garra rufa, by Dr. Steve Coxon

Easy Mode: an Introduction to CO2 Part4: Dissolving CO2, by Andrej Spec

Greater Pittsburgh Aquarium Society Inc. Finformation: Feb. 2024

Melanotaenia boesemani Lake Aytinjo, by Eric Bodrock

Greater Pittsburgh Aquarium Society Inc. Finformation: Mar. 2024

Limia yaguajali: "Rio Cana, Dominican Republic", by Eric Bodrock

Kitchener – Waterloo Aquarium Society, Fins and Tales: May 2024

Fairies are Real! by Glenn Roberts

Greater Pittsburgh Aquarium Society Inc. Finformation: May 2024

Ancistrus sp. L309, by Eric Bodrock

Greater Pittsburgh Aquarium Society Inc. Finformation: July 2024

Trials & Tribulations Breeding Hyphessobrycon herbertaxelrodi (black neon), by Edward Moats

My Easter Grass, by Susan Everett

See you at the Richie Memorial Shelter on the following dates:

January 10th, February 14th, March 14th, April 11th, May 9th, June 13th, July 11th, September 12th, October 10th, November 14th, December 12th

August 8th Meeting Location To be Determined