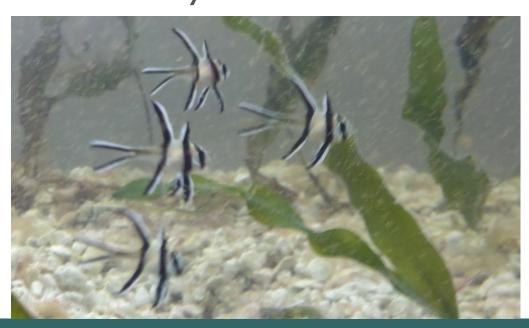
The Greater Akron Aquarium Society Tank Topics

November/December 2018



Tank Raised Banggai Cardinalfish fry at 5 weeks.

To find out how this was accomplished, check out Joe Doyle's article in this issue.

2018 GAAS Board of Directors

President	. Bud White	(330) 571-0394/pi	resident@akronfis	shclub.com
Vice President	. Jeff Plazak(330) 854-5257/jvicep	resident@akronfis	shclub.com
Treasurer	. Rich Serva	(330) 650-4613/tr	reasurer@akronfis	shclub.com
Secretary	. Misty White	(330) 706-9258/se	ecretary@akronfis	shclub.com
Editor	. Dave Williamson		editor@akronfis	shclub.com
Special Activities	. Dave Girard	speciala	activities@akronfis	shclub.com
BAP/HAP	. Wayne Toven	(330) 256-7836	/baphap@akronfis	shclub.com
Membership	. Mike Swanson	mem	nbership@akronfis	shclub.com
Raffle	. Phil & Tiffany Hype	es(330) 327-63	16/raffle@akronfis	shclub.com
Program/Historian	. Steve Brunn	. (330) 524-3096/	program@akronfis	shclub.com
FAAS Rep	. Ken McGill	(419) 677-34	405/faas@akronfis	shclub.com
Refreshments	. Elsie Swanson (44	0) 466-1799/refres	shments@akronfis	shclub.com
Web Master/Publicity	. Will White	(330) 706-9258/w	vebteam@akronfis	shclub.com

Check out our website: www.akronfishclub.com



Inside this issue:

President's Message Bud White	3
Editor's Message Dave Williamson	3
BAP/HAP Wayne Toven	4
Membership Report Mike Swanson	5
Exchange Review Wayne Toven	7
Banggai Cardinals Joe Doyle	8
Coming Events	10
Meeting Notice	10

Important Dates for 2018

March 4
Spring auction

June 9 & 10 Ultra Aqua 2018

November 4 Fall auction

Page 2 Tank Topics

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 second Friday of each month at 8:00 p.m. at the Ritchie Memorial Shelter House, 109 West Avenue, Tallmadge, OH 44278. It is located West of Tallmadge Circle with access from Sperry Ave., behind Vet Clinic and across from the Chevrolet 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 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. 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

The Greater Akron Aquarium Society Me	mbership Form
Name Age	Dues are for 1 year or 2 years if
Address	email publications are chosen
City State Zip	□ New □ Renewal
Phoneemail	□ Electronic □ Mail
How did you find out about GAAS?	Adult (18 years and older) & Family
Memberships are due one year from the date of joining. Completed mem-	(includes children under 10) \$10.00
bership forms can be turned in at a meeting or mailed to the membership chairman at this address:	Junior (10-17 years) \$5.00
GAAS Membership Chairman, P.O. Box 494, Akron, OH 44309-0494	Dues Collected Date Received

President's Message

Bud White

Hello folks,

Once again we had a great speaker last month, Frank Orteca, he gave us a great presentation on guppies. He had some very interesting points about selecting and raising good quailty guppies. Frank's friend Stan Jachna also was there to help with the program. They both were great. We did get a very nice compliment from Stan, he told me ours was the friendliest and best organized club he has been to. Thanks Frank and Stan!

It will be auction time soon, Nov 4, so please plan on helping with setup Satur-

Editor's Message

day Nov 3 at 7 pm at the Tallmadge Community Center. The more help the faster it gets done, we can usually have everything done in about 45 min to an hour with enough people to help. Then please plan to come to the auction Sunday, bring something to sell and stay and help with the things needing done. It is your club also and your contribution to it helps keep it alive and well!

Just a reminder, the auction will be before our regular meeting, hope to see you at both.

Cya, Bud





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

Dave Williamson

Now that we're firmly entrenched in Fall a couple things come to mind. . . Most notably the Fall Auction and Elections (both for club officers and the "real" ones). Taking them in chronological order, our auction is coming up very soon, in fact this issue of Tank Topics was done a week early to make sure it was out in time to remind everyone. I'm not going to go into every detail of what we need to do to make this event work, you'll find plenty of mention of it in other areas of this issue. Just keep in mind that it only does work because we, the members, make it work.

On to the club elections which will be at the November meeting. Here again, I'm not going to go into depth about all the positions and what they do, just think about bringing your unique skills and experiences to help secure the future of our organization to be able to do what clubs like ours do to further this hobby that we all love. Annddd, not to be let out in any discussion of elections, get out there and vote on November 6th! Regardless of your political leanings, consider this your chance to be heard, because it is!

One last thought about speaking up, in an organization like ours, this time of year is when plans are made for the coming year. Is there something we should include in our programs that we're not? Should we be doing outside events that we haven't been? It can be hard for those

of us who've been around for a while to see what newer members may be interested in doing or seeing. Speak up, otherwise we'll never know what you're thinking!

Ok, I'm done with the heavy stuff, now on to the real editorial stuff. . . I've been thinking it's time for a revamp of the look of Tank Topics, it's been about eight years since the last time, and things tend to get a little stale after a while. So next time you see this publication, it will look different. Most of the same stuff will be in it, it's just time for a "face-lift". You've got to remember I've been at this for a long time, and all my college graphic design courses were in the early eighties. It's easy to fall into a rut. So as per usual, suggestions are always welcome, and articles, especially articles, are really welcome!

I'll just leave you with a nice picture Wayne gave me of a hybrid Lobelia, just so you can think summer even though it's a long way off!

I'll see you at the meeting and the Fall Auction!





Page 4 Tank Topics



BAP/HAP Report

Wayne Toven

Fall is all around and so are the fish club's fall auctions, ours will be here before you know it, Sunday November 4th, hope to see some of you there. This will be a chance to obtain new breeder stock or young fish to raise up for breeding, or if you don't have enough tanks or equipment to house new fish, there is usually lots of available stuff to go up for auction.

This will be the last month (November) for turning in spawns or plant propagations, to be eligible for the Breeder of the Year and Horticulturist of the Year for 2018. They can be turned in at the auction which occurs before the monthly meeting or at the meeting. In case you are wondering we are behind last year's total by 9 spawns, hopefully some will be turned in November. The awards will be given out at the December meeting / Christmas party, and then we start all over for 2019 with a clean slate.

Spawns have been way down over the past three months, August only had two turned in, September only had two turned in, and October only had one turned in. What happened, did everyone's fish go on vacation for the summer?

September 2018 BAP Species	Common name	Class	Points
Wayne Toven Paralabidochromis chilot	'es	Cichlid m. b.	10
Dave Williamson Priapichthys nigroventral	lis black fin flash	er Livebearer	10
HAP Wayne Toven Cryptocoryne cordata Va Cryptocoryne wendtii gre Cryptocoryne wendtii gre Hibiscus coccineus scarl	een wendtii een wendtii	E – flowering E – flowering C – vegetative E – flowering	15 15 15 10
Dave Williamson Cryptocoryne nurii Pahai	ng – mutated	C – vegetative	15
October 2018 BAP Dave Willaimson Xenotoca lyonsi	red tail goodeid	Livebearer	10
HAP Wayne Toven Cryptocoryne lucens Lomariopsis lineata	Susswassertang	C – vegetative G – vegetative	15 10
Dave Williamson			

2018 Totals	BAP	Points	HAP	Points
Mike & Elsie Swanson	14	130	4	45
Dave Williamson	7	70	4	60
Wayne Toven	4	40	6	80
Will & Misty White	4	40	3	30
Bud White	3	35	-	-
Rich Serva	2	10	-	-
Bill Bilski	1	5	-	-
Steve Brunn	1	5	-	-
Jeremy Harsh	1	20	-	-
Ken McGill	1	5	-	-
Dan McMonigle	-	-	1	10

Microsorium pteropus narrow leaf Java fern D – vegetative

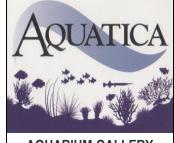


KENM333@COMCAST.NET

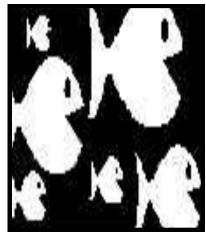


ALL ODDBALL AQUATICS

SALES@ALLODDBALL AQUATICS.COM www.alloddballaquatics.com



AQUARIUM GALLERY aquaticsuperstore.com 330.866.0559 6653 GRAFTON ROAD, VALLEY CITY, OHIO 44280



Bowl Show & Special Activities

David Girard

20 Bo So

2018 Bowl Show Schedule

Sorry that I did not get the results into the last issue. We are now up to twelve different people who have entered fish into the bowl show. Jeff and Dave have separated themselves from the pack with Jeff still in the lead with one month to go.

July Results

Natives

- 1 Dave Williamson- Crenichthys baileyi
- 2 Dave Williamson- Leptolucania ommata
- 3 Dave Williamson- Gambusia holbrooki

Plants

- 1 Dave Williamson- Cryptocoryne beckettii
- 2 Dave Williamson- Cryptocoryne albida
- 3 Dave Williamson- Cryptocoryne nouri (Pahang Mutated)

Angels & Discus

- 1 Madison Shaw- Koi angel
- 2 Madison Shaw- Blue angel
- 3 Madison Shaw- Marble angel

August Results

<u>Platies</u>

- 1 Jeff Plazak- Black and white platy
- 2 Dave Williamson- Black male
- 3 Dave Williamson- Gold neon painted Rainbowfish
- 1 Jeff Plazak- Melanotaenia maccullochi
- 2 Jeff Plazak- Melanotaenia maccullochi

Amphibians

- 1 Emilie Myatt- Axolotl
- 2 Dave Williamson- Axolotl

September Results

Goodeids

- 1 Jeff Plazak- Blue tailed Goodeid
- 2 Jeff Plazak- Blue tailed Goodeid
- 3 Dave Williamson- Xenotoca Iyonsi

Pairs

- 1 Jeff Plazak- Pepper cories
- 2 Dave Williamson- Cherry barbs
- 3 Dave Williamson- Aphyosemion sp. ntoba

AO New World Cichlids

No Entries

October Results

Gouramis & Anabantoids

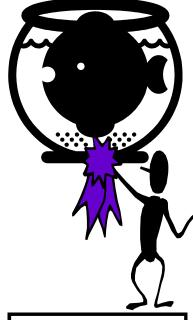
- 1 Jeff Plazak- Dwarf gourami
- 2 Jeff Plazak- Female Betta
- 3 Dave Williamson- Honey gourami

Arts and Crafts

- 1 Mike & Elsie Swanson- Angel fish
- 2 Mike & Elsie Swanson- Frog
- 3- Mike & Elsie Swanson- Pond

AO Old World Cichlids

No Entries



2018 Standings

Jeff Plazak-99

Dave Williamson-84

Mike & Elsie Swanson-31

Will & Misty White-29

Wayne Toven-25

Ken McGill-13

Rik & Dana Borger-10

Emilie Myatt-5

Jeremy Harsh-5

Brandon Snopek-2

Rob Williams-2

RIFT LAKE AQUATICS

TROPICAL FISH, FRESHWATER & MARINE SUPPLIES and PREMIUM FISH FOODS

Jim Laco



6777 Engle Rd. Suite J Cleveland OH 44130 (216) 215-1639

email: jim@riftlakeaquatics.net www.shop.riftlakeaquatics.net

January: Male Guppies Goldfish

Minnows, Danios & Rasboras

February:

Domestic Swordtails,

Betta splendens,

Characins (Tetras & relatives)

March:

Mollies

Suckermouth Catfish Barbs

April:

Female Guppies Corydoras, Aspidoras & Brochis

Photography

Mav:

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 Pairs (male/female)

October:

Gouramis & Anabantoids AO Old World Cichlids Arts & Crafts

November:

AO Livebearers AO Egglayers AO Catfish Page 6 Tank Topics

Membership Report

Mike Swanson

I would like to say that I have been very happy with our speakers this year. I would like to thank Steve for lining them up. I have learned plenty, whether or not I can put some of this information to good use in our fish room is another story. I would also like to remind everyone that this month's meeting is election month for board positions, we have several openings and the help would be appreciated. We will miss our board members who are stepping down and hope that they can continue to enjoy

the hobby. Also the auction is coming up on November 4th, set up is on November 3rd at 7pm. Any help setting up or working at the auction would be great. I hope to see everyone at both the auction and next meeting.

I would like to welcome our new members:

Frank Orteca Stan Jachna Jeff Walmsley Kaitlynn Breedlove Dr. Adam Leff

And a "Thank you" to our renewals:

Joe Reich Dave Girard

We have a few memberships expiring in November and December:

Ken Galaska Gordon R. Beals Matt Lacey William Schake Ryan Takarchek Gene P. Justice Dave Stevenson Adam Drugovich Bart Kraeger

Thanks, Mike Swanson

GAAS Fall Auction November 4

Tallmadge Community Center 80 Community Rd. Tallmadge, Ohio 44278

Registration 10 am - 12 pm Auction begins at 11 am

For more information:

Bud White (330) 848-3856 (president@akronfishclub.com) Wayne Toven (330) 256-7836 (baphap@akronfishclub.com) Rich Serva (330) 650-4613 (treasurer@akronfishclub.com)

www.akronfishclub.com or

https://www.facebook.com/Greater-Akron-Aquarium-Society





Be here or you'll never know what you missed! Tank Topics Page 7

Exchange Report

Wayne Toven



First off, there was a reprint of Dave Williamson's article "A Fish Named Moose" in the Sept. 2018 issue of Erie Aquarium Society's Aqua News. If anyone is even slightly interested in reading one of the articles I have reviewed below let me know and I will get it to you via email or hard copy at a meeting.

Greater Pittsburgh Aquarium Society Inc. Finformation: June 2018

Bleher's Raibowfish, by Regina Spotti

Pekoltia lujani, L127/L207, by Eric Bodrock

Melanotaenia utcheensis, by Eric Bodrock

Ohio Cichlid Association, Buckeye Bulletin: Aug. 2018

Visually Comparing Synodontis pettricola & Synodontis lucipinnis, by Burger Kamprath

Synodontis polli, by Daniel Ogrizek

Circle City Aquarium Club, Fancy Fins: Aug. 2018

Beckford's Pencil Fish, by Bob Hargis

Kitchener – Waterloo Aquarium Society, Fins & Tales: Sept. 2018

Flow – Aquarium Filters, by Karen Murray

Do You Have Crabs? By Glenn Roberts

This Aquarium Thing, by Jay Oliver

Aquarium Plants, by Stuart Morley

Missouri Aquarium Society Inc. The Darter: Sept/Oct 2018

Tank Stocking and Compatibility, by Holly Paoni

Lophiobagrus brevipinnis, the Catfish That Breeds Like a Pleco, by Derek Walker

Macropodus opercularis the Paradisefish, by Mike Hellweg Quick, Easy, and Cheap Baby Brine Shrimp Hatching, by Chuck Bremer

St. Catharines & Area Aquarium Society, The Scat: Oct 2018

Keeping and Breeding Demasoni Cichlids, by Andrew Fruck

Turquoise Cichlids – Herichthys tepehua "ssp. Turquoise", by Andrew Fruck

Kitchener – Waterloo Aquarium Society, Fins & Tales:Oct 2018

Preparing to go to the Auction, by Karen Murray

Aquarium Squared, by Karen Murray

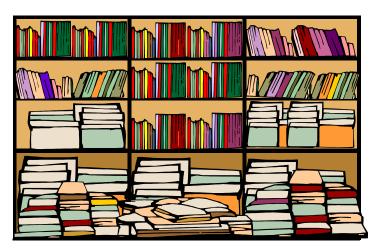
My Favourite Fish... This Week, by Glenn Roberts

Ohio Cichlid Association, Buckeye Bulletin: Oct. 2018

Apistogramma in a Community Tank, by Mike Wise

Hamilton & District Aquarium Society: Oct. 2018

Spawing Aspidoras fuscoguttatus, by Charles Drew







Page 8 Tank Topics

Pterapogon kauderni (Banggai Cardinalfish)

BAP Article by Joe Doyle

The Banggai cardinalfish (Pterapogon kauderni) is a small tropical cardinalfish (family Apogonidae). This attractive fish is popular in the aquarium trade. It is among the relatively few marine fish to have been bred regularly in captivity, but significant numbers are still captured in the wild and it is now a threatened species.[1]

Distribution

This species is restricted to the Banggai Islands of Indonesia.[2] This species has an extremely limited geographic range (5,500 km²) and small total population size (estimated at 2.4 million).[3] The Banggai cardinalfish is composed of isolated populations concentrated around the shallows of 17 large and 10 small islands within the Banggai Archipelago. A small population also occurs off Central Sulawesi, within Luwuk harbor. One additional population has become established in the Lembeh Strait (North Sulawesi), 400 km north of the natural area of the species distribution, following introduction by aguarium fish traders in 2000.[3]



(Figure 1) Male holding egg ball left back, female front right.

Background

It has always been a struggle for me to understand the complexities of keeping a salt water aquarium. I had

been under the impressing that keeping salinity of water with in a certain range was difficult to maintain. And producing R/O (Reverse Osmosis) water in quantity would be time consuming and costly.

My goal is to show the reader, being a novice or expert in aquatic husbandry, an easy and affordable way to spawn & raise salt water fish, namely the Banggai Cardinalfish.

Requirements

If you are keeping Corals, R/O Water is needed to keep phosphates in the water to a minimum. Phosphates in the water can cause an explosive growth of algae when nitrate levels rise. For the purpose of breeding salt water fish and not maintaining corals, R/O water is not necessary.

My tap water comes out at 7.4 pH. Only sea salt was added to declorinated tap water to raise the salinity of the water to a level of 1.027. If an algae bloom does occur, a magnetic aquarium cleaner and a 30% water change will resolve the excess nutrient issue. Only keeping the front glass clean is needed to keep an eye on fish activity. Algae, in my opinion, is a healthy part of any aquarium; and can be the breeding grounds for zoo plankton and copepods - - natural first foods for fish.

Hydrometer verses Refractometer

Hydrometers are inaccurate and sometimes change in readings with age. A refractometer is a very precise method of measurement and will not change in time. I highly recommend their use to determine a precise measurement of water salinity in both your aquarium and in water replacement. Your LFS (Local Fish Store) sells refractometers for approximately \$50.

Salt Water tank setup

Setup a 30 gallon aquarium. Crushed Coral as a sub straight, at least 1" thick. Heater set at 74F. Dechlorinated tap water having a salinity of 1.027 and a sponge filter.

Did not use a protein skimmer mainly because I wanted to show that 30% water changes & cleaning half of the sponge filter was enough to keep the water parameters stable for fish to spawn. Protein skimmers do a lot to keep contaminants under control, but not necessary when frequent weekly water changes are underway.

No water filter needed. Corals needs a constant water flow, fish do not.

Last, we need to cycle the tank to kick start the Ammonia/Nitrite/ Nitrate cycle. Salt water takes 6 weeks for this process to complete. I began with a pair of mollies acclimated to salt water using the drip method (air line tubing tied in a knot). 45 minutes later, I added the pair to the tank. Fed the mollies regular fish food and/or bbs. Did not change the water for 6 weeks. Did add fresh water slowly to replace evaporated water, as needed. At the end of the 6 weeks, I squeezed half the sponge filter and performed at 30% water change, replaced water with same salinity 1.027. Removed to mollies and added the Banggai cardinalfish-

Breeding

Banggai cardinalfish spawn readily in the home aquarium. I purchased 4 individuals from a LFS in hopes of obtaining at least one pair. After a week, a pair began working together to keep the other two less dominant fish cornered in a 30 gallon fish tank. Removed the outcast fish, and let the pair get down to business. The pair saw the other two Banggai's in the neighboring tank and spent their entire day defending their territory and not spawning. Had to erect cardboard between either side of the tank to help the pair feel secure. Five

Tank Topics Page 9

weeks went by and still no spawn.

Raised the tank temperature to 81F, lowered the salinity to 1.024, performed a 30% water change and the pair spawned 3 days later. The male held the eggs for 10 days, then dropped the eggs. I had been feeding the pair frozen brine shrimp every day. Learned from a fellow hobbyist they needed something with a higher caloric count, and more nutrients.

Thawed enriched Mysis Shrimp and soaked using SELCON (an unsaturated fatty acid). Took this a step further and began adding a cap full of liquid vitamins (Vitality) and a cap full of Garlic Guard allowing the thawed Mysis Shrimp to soak in the refrigerator for 24 hours before feeding to the pair. I have had more than 2 people tell me that Mysis Shrimp should not be enriching longer than 3 -4 hours; however, I can't deny the positive outcome 24 hours of soaking has had on the pair. This issue still remains unsettled.

The male held onto his second clutch of eggs for 20 days and released 6 fry. Used a baby brine shrimp net to catch the first fry. Caught the male in a net to move him, and he immediately released the remaining fry. My biggest fear was that the female would eat the babies, since I kept the male & female together the whole time.



(Figure 2) Fry born at 3/16".

The babies were held in a square breeder net in the parents 30 gallon tank in order to protect the fry from the adult fish & keep the shock of

changing water parameters to a minimum. Initially, the fry were born with yoke sacks which took 3-5 days to absorb. Small feeding regiments followed. The babies were fed at 7:00am, 7:00pm, and 10:30pm either new born live bbs (baby brine shrimp), or if bbs were older than 12 hours, enriched bbs (SELCON) not longer than 9 hours. I must note here, the fry were fed very small amounts to keep excess waste to a minimum.



(Figure 3) Fry at 1 week.

After 3 weeks, the 6 babies were netted with a bbs net and placed in a Lee's specimen container and drip acclimated to a new 30 gallon having a salinity of 1.024 (same as parents tank). The babies experienced Sudden Fright Syndrome (SFS) when they were moved, and appeared to be dead and not breathing. The fry were released after 15 minutes of acclimation, mostly due to my concern for the fry appearing to be dead.

above them. What ever was said in the water worked. All 6 fry returned to their happy selves and cautiously explored the 30 gallon aquarium as a group. After a week, individuals started exploring in pairs, and then on their own.

Initially, the rate of growth in the new borne were explosive doubling for the first few days. Born at 3/16", they reached 1/2" in 3 weeks, 3/4" in 5 weeks, and 1" in 8 weeks.

I've read various articles on the internet about raising fry. Biggest concern shared by many enthusiasts is fry overcrowding and out competing for food. Having only 6 fry in a 30 gallon is not an issue.

At 2 months of age, began adding chopped enriched Mysis shrimp to each feeding. The goal is to make this their primary food source; however, I still feed the parents enriched bbs, which they feed on in between meals. Will continue this regiment with the fry.

When the babies reach 6-8 months of age, they will be sexually mature and begin pairing off. Until then, the sub adults will continue to display schooling behavior when frightened.

Hope you will join me in promoting aquarium raised Banggai cardinal-fish. And I hope I have provided an affordable and realistic method for spawning salt water fish.



(Figure 4) Fry at 3 weeks.

The fry that were unaffected by the experienced swam to the seemingly dead siblings and cheered them to get up, by bouncing in the water

References

[1] Vagelli, A. & Wabnitz, C. (2007). Pterapogon kauderni. In: IUCN 2007. IUCN Red List of Threatened Species. Downloaded on 95 January 2010.

[2] Froese, Rainer, and Daniel Pauly, eds. (2007). "Pterapogon kauder-

ni" in FishBase. July 2007 version.

[3] CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA. Fourteenth meeting of the Conference of the Parties. The Hague (Netherlands), 3-15 June 2007.

The Greater Akron Aquarium Society

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

«firstname» «lastname»

«address»

«city», «state» «zip»

Meeting Notice - Do Not Delay

Meeting Notice

Friday, November 9

Program: GAAS member Elsie Swanson will present "Fish Tales," which will be a photo and video tour of the fishes (past and present) that Mike and Elsie keep, show, and spawn. Elsie will be sharing her stories of success and defeat along with old and new techniques.

Bowl Show: All Other Livebearers, All Other Egglayers, All Other Catfish

Friday, December 14

Program: This is the meeting that the Greater Akron Aquarium Society has a party for its members and rewards them for their annual support and participation with fun and prizes. There will be enough door prizes of fish and aquarium plants to let everyone win something nice. Please bring a side dish, salad, or dessert to share.

General meetings begin at 8:00 p.m. at the Ritchie Memorial Shelter House



A couple of views from the auctioneer's perspective at the 2017 Fall Auction

Coming Events

Nov. 16 – 18 2018

Ohio Cichlid Association Extravaganza

Holiday Inn – 15471 Royalton Rd. Strongsville, OH 44136 www.ohiocichlid.com/ extravaganza